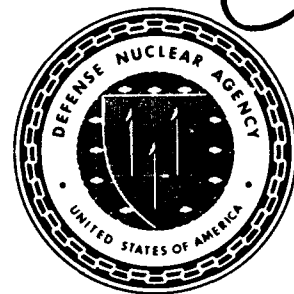




Defense Nuclear Agency
Alexandria, VA 22310-3398



DNA-TR-90-1

AD-A229 662

Policy Considerations Affecting Nuclear Forces Modernization

Jacquelyn K. Davis
Charles M. Perry
Robert L. Pfaltzgraff, Jr.
Institute for Foreign Policy Analysis
Central Plaza Building
675 Massachusetts Avenue
Cambridge, MA 02139

November 1990

Technical Report

DTIC
ELECTE
DEC 18 1990
S B D
Co

CONTRACT No. DNA 001-87-C-0033

Approved for public release;
distribution is unlimited.

Destroy this report when it is no longer needed. Do not return to sender.

PLEASE NOTIFY THE DEFENSE NUCLEAR AGENCY,
ATTN: CSTI, 6801 TELEGRAPH ROAD, ALEXANDRIA, VA
22310-3398, IF YOUR ADDRESS IS INCORRECT, IF YOU
WISH IT DELETED FROM THE DISTRIBUTION LIST, OR
IF THE ADDRESSEE IS NO LONGER EMPLOYED BY YOUR
ORGANIZATION.



DISTRIBUTION LIST UPDATE

This mailer is provided to enable DNA to maintain current distribution lists for reports. We would appreciate your providing the requested information.

- ☐ Add the individual listed to your distribution list.
- ☐ Delete the cited organization/individual.
- ☐ Change of address.

NOTE:
Please return the mailing label from the document so that any additions, changes, corrections or deletions can be made more easily.

NAME: _____

ORGANIZATION: _____

OLD ADDRESS

CURRENT ADDRESS

TELEPHONE NUMBER: () _____

SUBJECT AREA(s) OF INTEREST:

DNA OR OTHER GOVERNMENT CONTRACT NUMBER: _____

CERTIFICATION OF NEED-TO-KNOW BY GOVERNMENT SPONSOR (if other than DNA):

SPONSORING ORGANIZATION: _____

CONTRACTING OFFICER OR REPRESENTATIVE: _____

SIGNATURE: _____

CUT HERE AND RETURN



Director
Defense Nuclear Agency
ATTN: TITL
Washington, DC 20305-1000

Director
Defense Nuclear Agency
ATTN: TITL
Washington, DC 20305-1000

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
<small>Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.</small>				
1 AGENCY USE ONLY (Leave blank)	2 REPORT DATE 901101	3 REPORT TYPE AND DATES COVERED Technical 870101 to 900215		
4 TITLE AND SUBTITLE Policy Considerations Affecting Nuclear Forces Modernization		5 FUNDING NUMBERS C - DNA 001-87-C-0033 PE - 62715H PR - RO TA - RA WU - DH017770		
6 AUTHOR(S) Jacquelyn K. Davis, Charles M. Perry, and Robert L. Pfaltzgraff, Jr.				
7 PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Institute for Foreign Policy Analysis Central Plaza Building 675 Massachusetts Avenue Cambridge, MA 02139		8 PERFORMING ORGANIZATION REPORT NUMBER		
9 SPONSORING MONITORING AGENCY NAME(S) AND ADDRESS(ES) Defense Nuclear Agency 6801 Telegraph Road Alexandria, VA 22130-3398 NASF/Zimmers		10 SPONSORING/MONITORING AGENCY REPORT NUMBER DNA-TR-90-1		
11 SUPPLEMENTARY NOTES This work was sponsored by the Defense Nuclear Agency under RDT&E RMC Code B4662D RO RA 00043 NASF 3860A 25904D.				
12a DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution is unlimited.			12b DISTRIBUTION CODE	
13 ABSTRACT (Maximum 200 words) This report provides an assessment of security perspectives, key defense programs and emerging procurement/weapons modernization priorities in six NATO-European countries—the Federal Republic of Germany, France, the United Kingdom, the Netherlands, Italy, and Belgium. Included is a detailed analysis of the various national perspectives held in each country on issues related to nuclear force acquisition and modernization, conventional force restructuring, and East-West arms control (especially with respect to the CFE talks and potential SNF negotiations). The overall objective of this study is to provide the DoD Acquisition and Policy communities with an up-to-date examination of key political trends and defense policy debates in critical NATO-European countries, with special attention paid to budgetary decisions, military hardware initiatives, and arms control proposals that may impact directly upon vital U.S. (and NATO) defense programs.				
14 SUBJECT TERMS SNF Modernization Arms Control NATO Procurement Programs			15 NUMBER OF PAGES 92	
European Security Views Allied Defense Spending CFE Planning			16 PRICE CODE	
17 SECURITY CLASSIFICATION OF REPORT UNCLASSIFIED	18 SECURITY CLASSIFICATION OF THIS PAGE UNCLASSIFIED	19 SECURITY CLASSIFICATION OF ABSTRACT UNCLASSIFIED	20 LIMITATION OF ABSTRACT SAR	

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE

CLASSIFIED BY

N/A since Unclassified

DECLASSIFY ON

N/A since Unclassified

14. SUBJECT TERMS (Continued)

National Nuclear Forces
U.S.-European Defense Collaboration,
Alternative Security Frameworks
NATO Policy Planning
Force Restructuring
Federal Republic of Germany

France
United Kingdom
The Netherlands
Italy
Belgium

Accession For	
NTIS GRA&I	<input checked="checked" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	



SECURITY CLASSIFICATION OF THIS PAGE

EXECUTIVE SUMMARY

I. OVERVIEW

- European defense perspectives over the course of this contract have been profoundly shaped by Mikhail Gorbachev's induced reforms in the Soviet Union and Eastern Europe. Across the political spectrum in all countries under study changing threat perceptions have contributed to diminished public support for defense spending and the military as an institution. At the same time, not surprisingly, there has clearly been an increase in public support for arms control, in part as a means of controlling defense expenditures and of reshaping military force structures.
- European interest in arms control is manifested in support for an early CFE I agreement and for the start of SNF negotiations. While there are differences across countries, and within domestic constituencies, over the timing and phases of a prospective SNF negotiation, there is virtual consensus that an eventual NATO SNF modernization package must include an arms control component if weapons upgrades are to be attained at all. Flowing from this, there is general agreement that any prospective SNF modernization decisions must be arms control "friendly" and incorporate an acceptable verification regime.
- Across the countries under study and within their respective domestic constituencies, there is debate over future NATO force structure requirements and defensive concepts. There is also debate over the appropriate nuclear/conventional force mixes and the preferred deployment modalities for NATO nuclear forces. Easy resolution of these issues is not likely for NATO, given the growing prominence of political factors shaping defense decision-making in all NATO countries.
- There has been a dramatic transformation in the NATO decision process, particularly as regards nuclear weapons deployments, but also affecting conventional force procurements and weapons deployment concepts. Here, too, political considerations have played, and are continuing to play, a greater role, a condition that is unlikely to change.
- As a result, defense spending and national weapons procurement trends are likely to remain on the downturn, while public support for military cuts will be sustained. In this environment, NATO-European allies can be expected to emphasize, to a far greater extent than before, collaborative weapons programs, systems upgrades (as opposed to replacement), and use of modular component technologies to satisfy existing and projected national defense spending constraints and industrial concerns. This also may mean that fewer NATO-

European countries will be prepared to accept American-devised weapons requirements and deployment priorities.

- A growth in European multilateral cooperation, together with a paradoxical parallel trend toward greater nationalism and bilateral ties (e.g., Franco-German, Anglo-French, Dutch-Belgian), may increasingly define European approaches to security issues, and may result in the strengthening of other frameworks (than NATO) to deal with regional and Continental defense issues. Thus, there are likely to be increased calls for the European Community to move (EC) into the defense area and/or for a strengthened Western European Union (WEU) structure, although the latter will unlikely emerge as an institutional contender for NATO's role since the WEU has no empowering authority over its national government members. In any event, the United States can expect to face new challenges to its "leadership" position in the Atlantic Alliance, and, over the next decade, the role and structures of NATO will likely be subjected to considerable change.

II. FEDERAL REPUBLIC OF GERMANY

- Current West German security perspectives are being shaped by events in Eastern Europe and the prospect for resolution of the "German question."
- Few West Germans are willing to concede the deterrence protection that is afforded by U.S. forces, although more and more Germans, across the political spectrum, believe that the military-focused orientation of NATO (and the Warsaw Pact) needs to be redirected to the political realm to take on the role of manager in the evolving East-West relationship and arms control dialogue.
- Nevertheless, there is broad support for the reconfiguration of forces deployed in the FRG, both in the NATO context and with regard to the *Bundeswehr* itself. In the NATO arena, there are rising calls for the withdrawal of some foreign forces from West German soil, although for the moment a majority favors a continuation of forward-based U.S. conventional forces, but restructured to conform with negotiated cuts arising from the CFE process. For the *Bundeswehr*, there is support for a restructuring that takes into account a lower peacetime end-strength ceiling, although there is continuing debate over the defensive concepts that its deployment should support.
- SNF modernization is widely viewed as a "dead" issue in the FRG, although the current Government maintains its position that a final decision on FOTL will not come until after the December 1990 Federal election.

- AFAPs modernization is opposed, virtually across the board in the FRG, and *Lance* modernization would only be supported (if the current Government coalition is reelected) in the context of a broader arms control framework that provides for cuts in both NATO and Soviet nuclear SSM inventories. Even then, it is doubtful, unless the situation changes drastically in Eastern Europe and/or the Soviet Union, that a new Kohl Government will support FOTL; but if it does, choice of a missile and launcher must be "arms control friendly." One compromise may be West German support for a *Lance* SLEP option, although even this would likely come in the context of an arms control package that emphasizes early SNF negotiations and reduced inventory ceilings.
- Across the political spectrum in West Germany, there is support for early SNF negotiations, not tied to the progress or implementation of a CFE accord.
- TASM deployments are viewed by Government analysts and politicians as a way out of the SNF controversy, but critics claim that the expected deferral of FOTL will lead to a *de facto* "third zero" option. Opposition parties (SPD and Greens) openly oppose TASM deployments, leading many MOD analysts to suggest that once *Lance* modernization is "killed," then TASM will be the next target.

III. FRANCE

- French anxieties over the disintegration process in Eastern Europe, and in particular the prospects for the reunification of the two Germanies, has led French officials to take a harder line on the arms control process now in train in Europe. Specifically, while the French support the CFE process, they are adamant that their theater nuclear forces (including *Hadès* and DCA) not be included in either a CFE or a prospective SNF negotiation.
- French perspectives on defense and deterrence issues are shaped by their deployment of national nuclear forces, which continue to command the focus of attention in defense allocations and force structure decisions. Still, within France there is debate over the role and deployment posture of French "tactical"—or "prestrategic", as they are called—nuclear weapons, and many politicians and analysts view the *Hadès* SNF, for example, as a potential "bargaining chip" in a future, prospective East-West arms control negotiation on European-oriented theater nuclear forces.
- There is a growing debate today in France over what some defense analysts suggest to be a discrepancy between French strategic doctrine and employment policy and current weapons acquisition and modernization programs. If, for example, French tactical nuclear weapons are to be employed in a warning role, then why, critics ask, should they be procured in such

large numbers and across such a variety of platforms (*Hadès*, *Mirage 2000N*, and *Super Etendard* modernization to deploy ASMP)?

- While French defense allocations over the last three years have remained more or less constant, at just under 4% of the Gross Domestic Product, defense budget cuts over the last two years, in particular, have been programmed, affecting nuclear as well as conventional forces programs. Over the next three years, nuclear force allocations are projected to fall by 5.44% (from the projected expenditures of the 1987 Budget Guidance); and the only program area that is likely to grow will be space authorizations, which are expected to increase by 13%. Nuclear force programs will give priority to SSBN modernization and the development of stealth technologies for the M-5 warhead, although ASLP development (hopefully with the British) also has been given priority, as have *Mirage* modernization programs.

IV. UNITED KINGDOM

- British governmental concern over the potential for instability in Eastern Europe has reinforced an assessment that a "go slow" approach to SNF issues, including modernization questions and deployment issues, is an appropriate policy. Nevertheless, the United Kingdom is actively evaluating TASM candidate technologies, and the Thatcher Government continues to articulate publicly a rationale for FOTL. In private, however, it is suggested that NATO may have to come to a compromise in which FOTL is sacrificed for TASM, although this is decidedly not the preferred outcome of the British government for NATO's SNF decision process.
- In any event, the British government opposes the start of SNF negotiations until after a CFE I agreement is implemented. Yet, many British analysts now agree that if NATO is to achieve any SNF modernization at all, it will have to come in the context of a comprehensive package that includes an arms control component.
- Thus far, the British appear not to have underway a major study on force restructuring options for the post-CFE environment, although, to be sure, there are in progress analyses of a future weapons procurement architecture and force structure options designed to update the *Long Term Defense Plan*, rendering it compatible with requirements of likely emerging hypothetical scenarios. Preliminary analysis is said to suggest that the tank (in the British view) may not have become obsolescent in the European theater, and that enhanced decision-making structures and mobilization capabilities, including lift assets, will form acquisition priorities in the future.

- To offset potential reductions in defense spending levels (due to inflation) and to compensate for rising equipment and manpower costs, the British, like other NATO allies, will rely increasingly on collaborative weapons programs and "off-the-shelf" buys. This is, of course, true for the British commitment to participate in EFA, and it is also likely to be the case with regard to TASM procurement. Even as American SLAT and SRAM technologies are under evaluation in Britain, and the British government would clearly prefer to utilize a U.S. (as opposed to a French South Pacific) test site for its TASM warhead program, there is speculation that the Government may ultimately choose the French ASLP option to satisfy a diverse "European" constituency (both domestic and external), and to moderate the perception of a "hard-line" Thatcher approach to European collaboration.

V. THE NETHERLANDS

- The September 1989 election has led to the formation of a new center-left government composed of the centrist Christian Democratic Appeal (CDA) and the Labor (PvdA) parties. The government brings into office new leadership at the Ministry of Defense — specifically, as Minister of Defense, Relus ter Beek, and his deputy, State Secretary Baron B.J.M. van Voorst tot Voorst — who hold security perspectives significantly different from their predecessors.
- For the moment, the new Government is likely to adopt a more cautious, less "out-in-front" role in future efforts to balance the interests of the NATO Allies on SNF issues, largely because there is no longer a Dutch consensus on NATO nuclear modernization issues, even as they pertain to the "shift concept" which emphasizes deployment of longer-range SNF assets.
- Within the Dutch government, there is some support for early SNF negotiations, especially among Laborites, but for the moment, a majority view conforms to the timetable established at the NATO Summit, (i.e., after CFE I implementation).
- A near-term decision on FOTL development/deployment is considered unlikely in The Hague; but whatever decision emerges, it would have to be seen, in any event, as "arms control friendly" to gain the support of the current Dutch government. As for TASM, while it is generally seen as less controversial, elements of the Labor party have criticized the system as circumventing the INF Treaty.
- A key element of the agreement between the two parties in the new Government coalition was a revised spending plan for the Dutch military. It is now almost certain that Dutch defense spending will fall to a zero-growth level in the near term; real growth for FY 90 is

set at 0.6%, with no growth projected for the two years thereafter. In practical terms, this means the cancellation or postponement of a number of key procurement programs only recently undertaken by the last center-right Dutch government.

- At the broader level of Service missions, the impact of the revised spending priorities set by the new Dutch government will likely bring into sharper focus the issue of "mission specialization." Certain roles — specifically, sub-surface coastal patrol, maritime patrol aircraft, and the marine assault forces — may be eliminated from the Dutch force structure or at least substantially curtailed, especially if current Dutch Labor party perspectives prevail in this debate.

VI. ITALY

- Italian defense spending for 1990 represents a decrease (in real terms) of 3.3% over last year's funding, and, as a result, major weapons programs will have to be cancelled outright or scaled-back in terms of inventory numbers and time-schedules. For the current Government, a negative growth defense budget poses little political problem since Italian threat perceptions have dramatically altered over the last two years and the defense constituency in Italy is limited.
- Italian threat perspectives are oriented toward regional Mediterranean and Balkan issues; their interests in Central European defense issues — NATO's major orientation — is limited and there is, therefore, widespread Governmental and popular support for the CFE process. Some in Italy view prospective CFE cuts as providing a rationale for national force structure changes, reductions, and reorientation.
- On the whole, Italian defense analysts and politicians continue to see a need for NATO, but many expect its role to change dramatically over the next decade, barring a turn of events for the worse in the Soviet Union or Eastern Europe. Italians continue to support American force deployments in Europe (in the context of Extended Deterrence), but most would welcome a reduction in that presence to satisfy constituent interests and sovereignty concerns.
- Among all political parties, there is support for SNF negotiations, although the timing remains a contentious issue. In general, however, the Government's position is that Italy will support the West Germans on this issue, including the outcome of a potential West German decision with respect to FOTL.

VII. BELGIUM

- The center-left government of Prime Minister Wilfred Martens continues to cut back defense spending and to restructure military forces according to the recommendations of the Charlier Report (prepared by the Chief of the Belgian General Staff), but *without* implementing key modernization programs proposed by Charlier.
- This continuing decline in Belgian military spending is likely to be accelerated by public and political pressures for the near-term realization of a "peace dividend" resulting from changes in the European political-security environment. Such dividends are to be realized by defense spending cuts, but also through force structure reductions and procurement compromises.
- The compromise reached at the NATO Summit with respect to SNF modernization and arms control remains satisfactory to the Belgian government, which for the moment has placed the issue on the "back burner." However, Belgian opponents of SNF modernization — chiefly the Flemish Socialist members of the coalition, who led the Belgian rejection of early SNF modernization at the NPG meeting in October 1988 — would still prefer immediate SNF negotiations, similar to their socialist counterparts in the Netherlands and the FRG.
- Many Belgian officials — especially on the center-left of the political spectrum — hold a view similar to that expressed by West German leaders (notably Foreign Minister Hans-Dietrich Genscher) which regards SNF modernization as "politically dead." An agreement arising from CFE, they believe, will so fundamentally change the political-military dimensions of the European security environment that both the will and the rationale for modernizing SNF forces will evaporate. Following this, further reductions in the context of a CFE II regime, they go on to argue, will end the rationale for SNF systems entirely, opening the door to the complete elimination of U.S. and Soviet tactical nuclear weapons from the Continent.
- There is emerging a broad consensus that the future role of nuclear systems in NATO's Forward Defense/Flexible Response strategy will be limited to a "minimal deterrence" posture, wherein a greatly reduced number of nuclear systems (perhaps only a few dozen warheads) could be the "nuclear element" of NATO strategy. There is as yet no consensus among Belgian analysts, however, as to the nature of the nuclear systems that would fulfill this role. Some, chiefly the senior professional military, hold the view that longer-range, more survivable and accurate systems (such as TASM or, if West Germany should agree, FOTL) would be the preferred option. Others, particularly left-of-center members of the governing coalition (notably the Flemish Socialists), remain bitterly opposed to any SNF

modernization based on extended range systems, believing such systems to be unnecessary for the more political (as opposed to warfighting) "pre-strategic" warning role more appropriate for SNF assets in a minimal deterrence posture.

VIII. ACQUISITION ISSUES

- A prospective CFE agreement, together with declining popular support for defense spending in the NATO-European under study, will have implications for "off-the-shelf" acquisitions of key U.S. technologies and weapons systems, including a potential French purchase of the F-18 aircraft, a Dutch buy of the AH-64 helicopters, and British consideration of the U.S. M-1 Tank and SRAM-T technologies. In addition the possible "cascading effect" of an arms control regime in Europe could broaden European interest in purchase of U.S. "off-the-shelf" weapons systems, creating potential new markets for the disposal of Treaty-limited items.

PREFACE

In December 1986, the Defense Nuclear Agency awarded to the Institute for Foreign Policy Analysis (IFPA) an analytical contract entitled *Policy Considerations Affecting Nuclear Forces Modernization*. This study effort was focused on NATO Europe and encompassed analyses of the defense debates and force posture/procurement decisions in the Federal Republic of Germany, the United Kingdom, The Netherlands, Belgium, Italy and France (which remains outside of the Alliance's integrated military command structure). Over the three year course of this contract effort, IFPA has reported to its DNA program manager (Mr. Walt Zimmers, NASF) on a regular basis both in written *Quarterly Reports* and in oral format (briefings), and has interacted with DNA personnel in the preparation and execution of numerous symposia and technical workshops (6) organized in Europe and the United States as part of this contractual effort. The following thematic summary highlights, in outline format, the major trends and changes that have emerged in the NATO decision-making environment over the course of this contract effort and which have relevance to U.S. Service and OSD acquisition policies and DNA's mission.

Table of Contents

<u>Section</u>	<u>Page</u>
Executive Summary	iii
Preface	xi
List of Illustrations	xiv
List of Tables	xv
1 OVERVIEW	1
1.1 Introduction	1
1.2 A Three-Year Retrospective of Defense Decision Trends in NATO-Europe	1
1.3 Defense Spending and Weapons Procurement Trends	4
1.4 Arms Control Interests and Priorities	6
1.5 An Ongoing Requirement for Country-by-Country Analyses	11
2 FEDERAL REPUBLIC OF GERMANY	13
2.1 Reaction to Changes in Eastern Europe	13
2.2 Force Restructuring Concepts	14
2.3 SNF Issues	20
3 FRANCE	23
3.1 Reaction to Changes in Eastern Europe	23
3.2 Budget Cuts and Procurement Priorities	24
3.3 Restructuring French Forces	26

Table of Contents (Continued)

<u>Section</u>	<u>Page</u>
4 UNITED KINGDOM	35
4.1 Reaction to Changes in Eastern Europe	35
4.2 Force Restructuring Programs	36
4.3 Defense Spending Trends and Program Priorities	37
4.4 TASM/FOTL and SNF Negotiations	39
4.5 CFE Issues and Force Restructuring	41
5 THE NETHERLANDS	44
5.1 The September Elections: Changes in Key MOD Position	44
5.2 Changes in Dutch Defense Spending	46
5.3 Impact of Budget Changes on Procurement	47
5.4 Impact of Budget Changes on Potential Service Missions	50
5.5 The New Dutch Government and SNF Modernization Perspectives	52
6 ITALY	55
6.1 The New Government and Defense Budget Changes	55
6.2 Emerging Security Concerns	57
7 BELGIUM	62
7.1 Ongoing Budget Cuts	62
7.2 Revised Procurement Programs and Priorities	65
7.3 SNF Modernization	67
7.4 CFE Issues	69
7.5 The Future European Security System	69

List of Illustrations

Figure		Page
1	Defense Expenditures as a % of GDP: Comparison of Countries Under Study	5
2	1990 FRG Defense Budget: Outlays by Major Subcategory	17
3	Projected French Defense Procurement Spending 1990-1993	25
4	Major Program Allocations (#1)	27
5	Major Program Allocations (#2)	28
6	French Army Plan 2000	31
7	UK Defense Expenditure: Impact of Inflation	37
8	UK Defense Estimates 1989-1990: Analysis by Program Areas	38
9	UK Defense Estimates 1989-1990: Analysis by Commitments	42
10	Dutch Defense Spending: Comparison of Recent Plans	47
11	1990 Italian Defense Budget (#1)	55
12	1990 Italian Defense Budget (#2)	56

List of Tables

Table		Page
1	"Snapshot" Overview of National Perspectives on SNF Modernization and Arms Control: FRG	7
2	"Snapshot" Overview of National Perspectives on SNF Modernization and Arms Control: France	8
3	"Snapshot" Overview of National Perspectives on SNF Modernization and Arms Control: UK and The Netherlands	9
4	"Snapshot" Overview of National Perspectives on SNF Modernization and Arms Control: Italy and Belgium	10
5	1990 Defense Budget: Federal Republic of Germany	16
6	West German Army Restructuring	18
7	1989 SPD Party Platform, Positions on Defense and Security Issues	19
8	Major Elements of Allied Force Restructuring plans: Federal Republic of Germany	22
9	Impact of "Army 2000"	30
10	Major Elements of Allied Force Restructuring Plans: France	34
11	Major Elements of Allied Force Restructuring Plans: United Kingdom	43
12	Major Elements of Allied Force Restructuring Plans: The Netherlands	54
13	Major Italian Equipment Procurements in 1990 Defense Budget	57
14	Major Elements of Allied Force Restructuring Plans: Italy	61
15	Main Austerity Measures in the Charlier Report	63
16	Army Restructuring Under the Charlier Plan	64
17	Major Elements of Allied Force Restructuring Plans: Belgium	71

SECTION 1

OVERVIEW

1.1 INTRODUCTION.

Using a unique methodological approach based upon the development and delineation of competing Schools of Thought within the six countries under study, IFPA has been able to chart changes in the security perspectives of the defense elites and opinion makers in each country as they affect, or hold the potential for affecting, national and NATO decision-making on weapons procurements and deployments, force structure and strategy, and defense-industrial collaboration. The purpose of this analysis was primarily to assess the implications of decisions taken in Allied countries for the United States and NATO, especially in the realm of acquisition policy. A secondary objective was to identify the emerging defense decision-makers in each of the countries under study and to assess their respective views on questions of importance to U.S. Service planning and acquisition decision-making.

1.2 A THREE YEAR RETROSPECTIVE OF DEFENSE DECISION TRENDS IN NATO-EUROPE.

Over the course of this contract, it is clear that the on-going political-governmental changes in the six countries under study have been profoundly shaped by the coming to power of Mikhail Gorbachev in the Soviet Union and the prospects for *Glasnost* and *Perestroika* in Eastern Europe and the USSR itself. Across the political spectrum in virtually all of the countries under study, but perhaps to a lesser extent in France and the United Kingdom, the perception of a dramatically diminished Soviet threat, together with Moscow's unilaterally declared force reduction and arms control initiatives, have created an environment in which public support for defense spending and military force deployments has been radically undercut. In Britain and France, too, "Gorbymania" has had an impact upon popular and elite perceptions of the Soviet threat, but the "out-of-area" interests of these two countries, combined with their respective commitments to national strategic-nuclear force modernization, has sustained support for government allocations to the defense sector (although in both countries conventional force structures have been cut to accommodate nuclear modernization programs.) As a result, across the board in NATO-Europe, on a national level as well as in the NATO context, military force requirements

are being reassessed, more often than not, on the basis of a "how little is enough" orientation, and not in conjunction with any systematic analytical effort designed to match force structure requirements with likely threat scenarios — to look beyond present circumstances to examine potential threats in a changed security environment. For the United Kingdom, France and Italy, in particular, "out-of-area" considerations have emerged as a higher priority in their national defense planning, although the disintegration of communist regimes in Eastern Europe has raised for the Thatcher and Mitterrand governments, in particular, new concerns about the stability of Eastern Europe and the longevity of the Gorbachev-induced reforms.

More than at any other period during the course of this contract, the events of the last six months have focused European attention on the "German question" and what its resolution (in whatever fashion) will mean for the future of the Atlantic Alliance. Having come through a major debate in 1989 over the *Comprehensive Concept* guidelines, the United States faces an even more difficult challenge in the period ahead to develop an Alliance consensus on the purpose and missions of NATO as the fundamental basis for TransAtlantic defense collaboration. Unless present trends are reversed in Eastern Europe and the Soviet Union (leading to political retrenchment), the role and importance of NATO will be subjected to intense scrutiny in NATO-European countries, especially in the context of possible German reunification, a CFE agreement, and a more active role for the European Community (EC) in political cooperation and security affairs after the implementation of the single European market in 1992. Thus, for the United States and NATO officials, questions about military force requirements and force mixes are likely to assume a lesser priority as compared to the more pressing conceptual issue of the role for NATO in the emerging European security environment. Reaching agreement on the future function of the Alliance forms a necessary basis for defining credible and publicly acceptable defense and deterrence structures for the 1990s and beyond. From an European perspective, a new emphasis on national and regional European (as opposed to TransAtlantic) concerns will help to set the parameters within which Allied defense and force planning will take place; and, in this sense, U.S. Service planners and policy officials are likely to find themselves increasingly constrained by Allied policy preferences in weapons modernization and deployment decisions. While such a trend will probably be more immediately noticeable in the area of nuclear weapons development and deployments, it will also almost certainly affect conventional forces planning, procurement and restructuring.

Parallel to a new emphasis on regional European security frameworks among NATO-European countries, there has emerged over the last three years a greater sense of nationalism — and a preference for national solutions — among the European allies, especially the FRG. Together, these two seemingly contradictory trends — that is, a growth in European approaches and a rise

in national-bilateralism — have contributed to factionalism within the Alliance, greatly complicating NATO's search for Allied consensus on difficult and timely policy issues. The rise of "Europeanism", for example, can be documented in the broadening agendas of the European Community and the Western European Union. They can also be seen in the growing vociferousness of the European-NATO allies, and in particular, the West Germans, in Alliance debates. Such tendencies are accompanied by growing West German resentment over continuing and perceived encroachments of their sovereignty — the legacy of the World War II period which is no longer deemed appropriate in light of the FRG's global economic status. Most recently, West German concerns were manifested most notably in the low-level flight controversy, but these extend as well to NATO and U.S. force deployments and maneuvers on West German soil. Such concerns, moreover, have been stated perhaps most explicitly in the West German doctrine of "non-singularity," according to which Bonn will resist Allied modernization schemes that envision the deployment of advanced (and, often, controversial) military capabilities within the FRG alone. But growing sensitivity over national sovereignty issues, it must be understood, is not limited to the West Germans; it extends as well to other NATO-European countries which (under bilateral agreements) host U.S. and other Allied force deployments on their national territories. What this means in practical terms for U.S. defense planners is a growing need to monitor and to take fully into account the perspectives of its Allies — including their likely reactions to planned U.S. policy initiatives — before pressing ahead with new weapons modernization plans (no matter how well-founded militarily and technically the rationale for their development and deployment).

Closely related to the growing European interest in regional and national sovereignty issues, is the broader influence of environmental considerations on NATO planning. While environmental concerns have traditionally been high on European political agendas, over the course of the contract they were brought sharply into focus as a result of a diverse set of circumstances, including the Remscheid flight training accident in the Federal Republic of Germany in 1988, and the Chernobyl nuclear power plant meltdown in the Soviet Union in 1986. As a result, environmental constraints can be expected to affect more directly U.S. and NATO field exercises and deployments, and contribute to a greater reliance on the use of simulators and command post exercises for training purposes. Over the long term, environmental pressures are likely to exert an even greater impact upon Allied defense planning, affecting even procurement priorities, weapons design and preferred basing modes.

Over the course of this contract effort, it also became obvious that many of our NATO allies are attracted to new defense concepts designed to limit the offensive capacity of NATO's forces in favor of an emphasis on what has been called "defensive defense," which in practice could

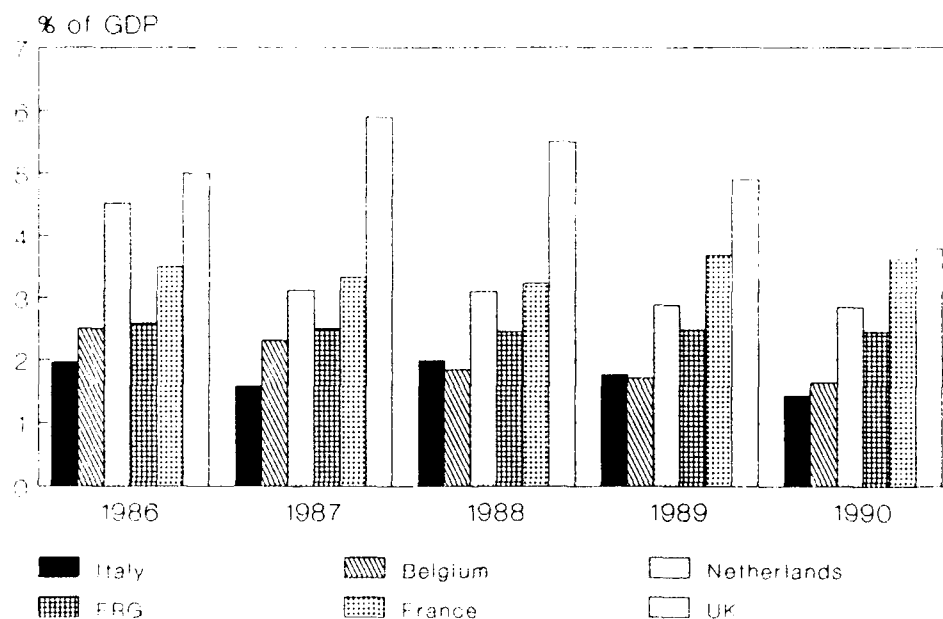
result in the effective dismantling of NATO's counter-attack capabilities. By and large, such concepts have tended to work against NATO plans for theater nuclear modernization (especially ground-based elements such as nuclear artillery), and have led to growing popularity among the European allies for new deterrence concepts based on Minimal Deterrence (currently referred to as "Existential Deterrence" or "Pure Deterrence"). Essentially what this shift in emphasis implies is the deployment of as few nuclear forces as possible on European soil. Some would advocate nuclear-capable aircraft platforms only, others would accept a reduced number of land-based tactical nuclear weapons assets that would be used as a nuclear trigger — or, more precisely, a "pre-strategic warning" — for the threatened employment of U.S. and British (or French) strategic nuclear forces in response to an attack against Western Europe. France in particular still places a premium on the modernization and deployment of national nuclear forces, but very likely this is because such systems form a national force designed to protect only the French national territory (or "sanctuary" as it is called) and vital French national interests (defined according to the conception of the President of France who, at this moment, seems to favor a narrow definition of what French nuclear forces would be used for). While there is some talk of the development of a European nuclear force, this concept holds little interest for either the United Kingdom or France in the absence of fundamental change in the political order in Europe. A more workable concept has been British and French cooperation with respect to submarine stationing and patrolling, which has also given rise to preliminary discussions of targeting options and potential collaboration on weapons procurements (as in the TASM area).

1.3 DEFENSE SPENDING AND WEAPONS PROCUREMENT TRENDS.

The striking asymmetry between French force posture, with its untoward emphasis on the nuclear component, and those of the other five countries under study during the course of this contract effort is clearly evidenced in their respective defense spending trends and weapons procurements priorities. Whereas France (in its defense budget guidance for the years 1987 - 1992) continued to give priority to nuclear weapons programs, cutting deeply into conventional force—especially Army—deployments to facilitate strategic weapons growth, the United Kingdom — NATO-Europe's other nuclear power — sustained a more balanced force posture and weapons modernization program, although *Trident* procurement clearly took precedence over conventional weapons acquisitions. For their part, the non-nuclear countries under study sought to scale-down their conventional force deployments because of adverse demographic trends, especially in the case of the Federal Republic of Germany and Italy, and — for all countries under study — for reasons of fiscal austerity. Some countries, such as Belgium, even forfeited major defense roles (deferring, for example, *Patriot* procurement for NATO's air

defense belt) and sought to promote greater role specialization within the Alliance — a long-held, but elusive NATO goal.

In most of the countries under study, with the possible exception of France (which has continued to spend almost 4% of its Gross Domestic Product on defense), defense spending has consistently been reduced in real terms. Some countries — most notably the Netherlands and Belgium — have even realized zero or negative growth rates in defense spending. What this has meant to NATO is the outright cancellation or stretch-out of major weapons acquisition programs and a growing trend toward *de facto* disarmament. If current conditions persist, it is not likely that defense spending trends will improve in any of the countries under study. In fact, NATO faces the prospect that its member states will reduce substantially in real terms their defense budgets, especially as developments in arms control perpetuate the perception that the Soviet military threat to Europe has been sharply reduced, if not eliminated altogether. At the very least, as the CFE process continues, and East European countries abandon communist political and



Constant 1980 prices and exchange rates

Figure 1. Defense expenditures as a % of GDP: Comparisons of countries under study.

economic systems in favor of multiparty governments and market economies, the perceived reduction in the threat of Soviet surprise attack (or, what Europeans term "attack without notice") is likely to lend support to the notion that significantly reduced military structures based on new defensive concepts are adequate for NATO deployments, which in any event, it will be argued, can easily be reinforced in a crisis situation (assuming, of course, that mobilization base infrastructures are maintained in the NATO countries--an assumption that may not prove to be the case if pressures for "reconversion" of Western military industries are sustained at a broad public level).

1.4 ARMS CONTROL INTERESTS AND PRIORITIES.

If current trends suggest a continuation of reduced defense spending in major NATO-European countries and the stretching-out of weapons procurement buys, one can only expect that Allied interests in arms control (in part as a means of controlling defense spending and reshaping existing force structures) will rise in NATO-European countries. Over the course of this contract, the interest of NATO countries in broadening the arms control process has grown significantly, and is most clearly manifested in the widespread European desire for a CFE agreement in 1990, and the imminent start of SNF negotiations. In the wake of the INF Treaty (and against the backdrop of the changes that are transforming the European security environment), the interest of NATO-European countries in arms control has probably grown out of proportion to what realistically can be expected from the process. Nevertheless, European expectations of sizeable CFE-related force reductions in the early 1990s has accelerated work on a number of national studies on force posture restructuring, both within and outside of the CFE context. These studies, moreover, are likely to be used as rationales for unilateral force reduction initiatives in several of the countries under study, including the Federal Republic of Germany, Italy, Belgium, and The Netherlands.

Apart from unilateral force reduction initiatives fueled in part by the CFE process, U.S. and NATO policymakers can expect further pressures for a second-phase CFE agreement and early SNF negotiations, without which NATO appears to have little prospect of modernizing its current inventory of "substrategic" nuclear systems. Such pressures will be accelerated by the Federal Republic of Germany and, in particular, by Bonn's growing preoccupation with the question of German reunification, even at the expense of NATO modernization. Over the course of this contract effort, there has been a rapid transformation in NATO as regards nuclear weapons deployments, but also affecting conventional force procurements and deployment considerations. Such changes have been documented in detail over the last three years in the analyses performed by this contract effort, and if anything has become clear from this study, it is that political considerations have assumed an almost greater role than military requirements in the

Table 1. "Snapshot" overview of national perspectives on SNF modernization and arms control: FRG.

	General Approach	AFAPs	FOTL	TASM/SOW	SLCM
FRG	<ul style="list-style-type: none"> • All parties emphasize a linkage between arms control and NATO nuclear modernization • Emphasis on early SNF negotiations (not tied to CFE implementation) • Some support in SPD and <i>Greens</i> for "third zero" • CDU/CSU and FDP emphasis on "pre-strategic" deterrence role of SNF • SNF modernization issues on "back-burner"; FOTL decision linked to 1990 election • SNF decision-influenced by current events and non-singularity/sovereignty issues 	<ul style="list-style-type: none"> • Virtually across the board opposition to nuclear artillery • Viewed as war-fighting capabilities • Division on how and whether to use as a "bargaining chip" • Some question as to whether the current government will allow completion of AFAPs modernization 	<ul style="list-style-type: none"> • Little support for new ground-based system; politically issue is dead • Compromise option may be support for <i>Lance</i> SLEP if current coalition wins election • In any event, <i>Lance</i> SLEP or FOTL must be "arms control friendly" • Politically, there is a requirement for launcher differentiation from MLRS • Some support for FOTL R&D as "bargaining chip" in SNF negotiations 	<ul style="list-style-type: none"> • Better chance for domestic support than FOTL • Prefer longer-range SOW options • Opposition parties oppose TASM deployments on basis of INF considerations 	<ul style="list-style-type: none"> • Off-shore basing option is attractive across the political spectrum • Viewed as a means of sustaining deterrence at lower SNF levels and as a means of "finessing" the <i>Lance</i>/FOTL issue

Table 2. "Snapshot" overview of national perspectives on SNF modernization and arms control: France.

	General Approach	AFAPs	FOTL	TASM/SOW	SLCM
<p>France</p>	<ul style="list-style-type: none"> • Supports theater arms control efforts, but for the moment, demands exclusion of French nuclear forces • Continues to emphasize importance of U.S. Extended Deterrent (over FRC) but will support some SNF reductions (in an arms control forum) • Opposes, with the exception of some PSF and PCF members, "third zero" option • Supports SNF deployments in "prestrategic" warning role, not as warfighting capabilities • Endorses SNF negotiations after CFE implementation • Anxiety over German reunification and consequent emphasis on European defense collaboration 	<ul style="list-style-type: none"> • Opposition among right and left to nuclear artillery role • No French deployments of nuclear artillery • Supports use of NATO AFAPs as "bargaining chip" 	<ul style="list-style-type: none"> • Government support for NATO FOTL is mixed, depending on outcome of CFE and resolution of "German question" • <i>Hadès</i> program is proceeding with 1995 IOC, but emerging view is to use it as an eventual arms control "bargaining chip" • Opposition RPR, some UDF support for both <i>Hadès</i> and FOTL; Socialist Party is divided on both systems, PCF opposes <i>Hadès</i> and FOTL 	<ul style="list-style-type: none"> • Modernization of French "tactical" and "strategic" nuclear aircraft platforms (with ASMP) funded in current budget • Center-left parties (PSF, some UDF) see SOW as more important after INF • Collaboration on long-range ASLP sought with the British 	<ul style="list-style-type: none"> • Locked into sea-based strategic nuclear ballistic missile deployments • SSBN/SLBM modernization program will increase French target coverage of Soviet Union • General disinterest in SLCM option

Table 3. "Snapshot" overview of national perspectives on SNF modernization and arms control: UK and The Netherlands.

	General Approach	AFAPs	FOTL	TASM/SOW	SLCM
United Kingdom	<ul style="list-style-type: none"> Thatcher government continues to support SNF modernization, with the need for some SNF "firebreak" systems forward deployed Government opposition to SNF negotiations before CFE is implemented, but acknowledgement that eventual SNF negotiation is inevitable Government opposition to "third zero", but support in opposition parties does exist Unwillingness to include British nuclear assets in SNF negotiations or DCA in CFE 	<ul style="list-style-type: none"> General, across the board opposition to nuclear artillery deployments AFAPs reductions and/or elimination seen as necessary to facilitate other SNF modernization 	<ul style="list-style-type: none"> Government support for FOTL, but recognition that deployment decision must be taken in context of arms control framework U.S. procurement needs seen as decisive, but launcher/missile decisions must allow for verification Labor and generally SDP-Liberal opposition to FOTL, but some see <i>Lance</i> as SNF "bar-gaining chip" 	<ul style="list-style-type: none"> Government priority is long-range SOW (some based in FRG) British "front-end" required Collaboration on SLAT or SRAM development with U.S.; but in the end cooperation with the French (on ASLP) may be chosen 	<ul style="list-style-type: none"> Locked into <i>Trident</i> technologies, but support for U.S. SLCM deployments
The Netherlands	<ul style="list-style-type: none"> For now, center-left (Christian, CDA/Labor) coalition endorses NATO Summit compromise, though Labor leaders would prefer earlier SNF negotiations Modernization can only proceed as part of larger arms control package All parties support Dutch "shift concept," favoring a smaller SNF inventory and greater reliance on longer-range systems Apart from Labor left-wing, little support for "third zero" option 	<ul style="list-style-type: none"> AFAPs reductions seen as necessary — though probably inadequate—price for FOTL and/or TASM "Shift concept" calls for fewer short-range systems, especially nuclear artillery 	<ul style="list-style-type: none"> Support still exists on center-right for FOTL, though decision more than ever seen in Bonn's hands FOTL must be compatible with future SNF arms control regime (i.e., to include FRODS) Some support in MOD for dedicated launcher, but most still endorse dual-capable system Concern in Parliament that use of MLRS may compromise conventional role of launcher Labor leaders ambivalent toward <i>Lance</i> upgrade; may support SLEP option or limited FOTL deployment, if Bonn agrees 	<ul style="list-style-type: none"> Most see TASM as politically less controversial, but also as vulnerable to "fall-out" from FOTL debate Some Dutch strategists now advocate TASM based on V/STOL, to improve survivability Many Labor, some CDA and some D'66 oppose TASM as potential circumvention of INF Treaty 	<ul style="list-style-type: none"> Growing support among center/center-right for off-shore basing, in the face of FOTL/TASM constraints MOD officials still see sea-based option as inadequate substitute for some ground-based SNF assets (even if only TASM)

Table 4. "Snapshot" overview of national perspectives on SNF modernization and arms control: Italy and Belgium

	General Approach	AFAPs	FOTL	TASM/SOW	SLCM
Italy	<ul style="list-style-type: none"> • Support "shift concept" emphasizing long-range SNF assets; Government will support FOTL development only if FRG does • Priority given to arms control over SNF modernization • Broad support for early SNF negotiations, not tied to CFE implementation, but not to result in "third zero" • Some PSI, PCI, and CDI support for "third zero" option 	<ul style="list-style-type: none"> • Across the board opposition to AFAPs, but will support deployments if the Germans do and in the context of a SNF arms control regime 	<ul style="list-style-type: none"> • Government position will be shaped by that of the FRG, but coalition generally sees FOTL as "dead" issue 	<ul style="list-style-type: none"> • Government position will be shaped by that of FRG • Expectation that U.S. 401st deployment will not be necessary due to arms control • Prefer no TASM based in Italy 	<ul style="list-style-type: none"> • Broad-based support for off-shore basing of SNF • Even some PCI support for sea-based cruise missile option • Government opposition to inclusion of naval forces in CFE, CSBM, and initial (prospective) SNF talks
Belgium	<ul style="list-style-type: none"> • Center-left coalition accepts NATO Summit compromise, but looks forward to SNF arms control as soon as possible • Flemish Socialists still favor "third zero" as ultimate goal • Governing parties - Christians, Socialists, and <i>Volkswijde</i> (Flemish Nationalists) - favor "freeze" on current SNF ranges (i.e., no long-range upgrades) • Arms control stressed over modernization 	<ul style="list-style-type: none"> • Growing interest in AFAPs cuts to minimal inventory numbers • Seen as inflexible asset of little real use (other than as "bargaining chip" in arms control) 	<ul style="list-style-type: none"> • No support for extended-range system among governing parties • Some support for a <i>Lance</i> SLEP-even among Socialists-as part of a broader arms control/modernization package 	<ul style="list-style-type: none"> • Broader support for TASM among conservative Liberals, centrist Christians and right-wing Socialists (i.e., Walloons) • Flemish Socialists, most <i>Volkswijde</i> and some Flemish Christians see TASM as breaking "spirit" of INF Treaty • TASM also opposed by Flemish Socialists as destabilizing "war-fighting" asset 	<ul style="list-style-type: none"> • Little open discussion of off-shore basing • Belgian anti-nuclear elements pressing for ban on port visits by nuclear-powered or nuclear-armed ships

national security debates of major NATO-European countries. It is, in fact, political issues which are driving the NATO SNF modernization debate and other nonnuclear weapons acquisition decisions. It is unlikely that this situation within the Alliance will change in the coming year, unless (again) present trends in Eastern Europe are dramatically reversed. Thus, in the area of arms control, Alliance discussion of force reduction allocations and verification issues is more than likely to be potentially acrimonious and, at best, characterized by intensive public and private debate. Subsequent debate over NATO's future arms control agenda, particularly as it may affect SNF negotiations and perhaps even discussions aimed at limiting naval systems, can be expected to display similar characteristics.

1.5 AN ONGOING REQUIREMENT FOR COUNTRY-BY-COUNTRY ANALYSES.

European perspectives on the major arms control issues facing NATO today, then, are being shaped by a number of factors, including changing threat perceptions, the events in Eastern Europe, and national pressures—including demographic, budgetary and environmental concerns—to restructure existing military forces. In each of the six countries under study, it has been abundantly clear that contrasting and, often, competing views among government coalition partners, between government and opposition parties, and, across institutional bureaucracies, have combined to form national positions that seem, from a U.S. perspective, to undermine the NATO decision process. In many instances, over the course of this contract, the respective intra-national debates in the six countries under study have resulted in national positions on defense-related issues that have been at odds with policies advocated by the United States, but which nevertheless have formed a necessary compromise designed to satisfy various internal constituencies. In coming years, the need in NATO-European countries for such domestic compromises on major defense-related issues is likely to increase rather than diminish. For this reason alone, there exists a compelling rationale for continued analyses of national perspectives, and for political assessments of the likely parameters within which future force posture, strategy, and weapons acquisition decisions will be taken both in NATO and on a national basis. In the increasingly complex security environment of the 1990s, and beyond, the requirement to monitor and assess emerging perspectives on defense-related issues in countries of major importance to the United States will continue to grow. This will be especially true, for example, with regard to West Germany which is contemplating unification with the German Democratic Republic. German unification carries potentially profound implications for NATO both in terms of its institutional structures and in the context of its strategic doctrine and tactical-operational planning. Already the Germans are moving to adopt changes in force structure and the planning basis of the Bundeswehr; in future years, especially in the context of unification with the DDR, it is highly likely that German military planning will likely adhere to some variant of the

“defensive” defense concept that is being pushed by “center-left” SPD security analysts. Germany’s strategic evolution will, in turn, effect U.S. planning and NATO cooperative efforts. As a result it is critical that U.S. defense decision-makers have access to timely analyses of the evolving “strategic” scene in Europe in order to make informed acquisition, procurement, military force structuring and doctrinal decisions.

SECTION 2 FEDERAL REPUBLIC OF GERMANY

2.1 REACTION TO CHANGES IN EASTERN EUROPE.

The events of the last six months in Eastern Europe and the Soviet Union are influencing profoundly West German security perspectives. Since World War II, German reunification has been the ultimate, if elusive, goal of West German policy. With the upheaval in Eastern Europe seeping into East Germany, and the opening of free transit between the two Germanies, reunification has become a plausible option and previous assumptions made about West Germany's security planning are now open to question and even subject to acrimonious debate in the FRG itself and between the West German's and their NATO allies. As a result, within government planning circles in the Federal Republic of Germany, there is nascent discussion of the future role of NATO and the development of a new security framework for Europe.

Even among West German military planners, there is discussion of new security structures based upon reduced defense spending allocations and a changed threat environment. In fact, within the West German government, there is a widespread perception that "all bets are off" when it comes to NATO and that, in this context, the failure of West Germany's western Allies to support German moves toward reunification (whether under a confederal-type or federal-like framework) could result in profound consequences for TransAtlantic and institutional collaboration within the Atlantic Alliance. Among members of the opposition Social Democratic Party (SPD) — as reflected in their various pre-election security manifestos — there is open concern that the United States may bloc German reunification efforts and this has given rise, in some quarters, to calls for West Germany's disassociation from NATO and even accommodation with the East. However, this is not an universally-held view within the SPD, and a large percentage of the Party's constituents appear to favor some association with Germany's Western Allies, including the United States and European Community members, even if the two Germanies do join together in a new relationship.

Nevertheless, consideration of what for years has been referred to as "the German question" inevitably means a rethinking of West Germany's security relationships, especially its ties to NATO and, on a bilateral basis, the United States. Yet, at this point in time, few West Germans would support a break in relations with the United States or the withdrawal of Germany from NATO, although the continued relevance of NATO has come into question in recent weeks in the popular press in West Germany. Most Germans apparently view NATO (and its American military component) as an inextricable link to the deterrence cover that is provided by U.S.

strategic forces. Even within SPD circles, there is tacit agreement that the United States continues to have a role in the emerging European security equation, particularly with regard to the extended deterrence coverage that is afforded by U.S. strategic forces, especially U.S. sea-based systems. In this context, there appears to be emerging in the Federal Republic a consensus, transcending political party affiliations, that the militarily-focused orientation of NATO and the Warsaw Pact needs to be redirected to the political realm to take on the role of manager in the evolving East-West relationship and arms control dialogue. Moreover, for many West Germans, a reconceptualized NATO structure should be tied to the enlarged European Community, and have formal ties to COMECON and the reform movements in Eastern Europe, particularly those in East Germany.

2.2 FORCE RESTRUCTURING CONCEPTS.

Influenced by Soviet President Mikhail Gorbachev's conception of a "common European house," and perceiving a greatly reduced threat from the Soviet Union and virtually none from Eastern Europe, a growing number of security analysts and the general public in the Federal Republic apparently are coming to the view that the size and structures of West Germany's armed forces must be reduced (together with those of other NATO and the Warsaw Pact nations) and reoriented (away from their capacity to implement offensive — including counter-offensive — operations). Already, the SPD, with the publication of *European Security 2000*, has set forth a security concept (authored by Egon Bahr, Karsten Voigt and Andreas von Bülow) which, while programmatically less than clear, would nevertheless alter fundamentally the basis of *Bundeswehr* planning and the ways in which military forces could be employed. Essentially what the SPD defense concept calls for is a substantially reduced *Bundeswehr* force posture that would be structurally incapable of implementing offensive operations, a shift in focus, according to its authors, that should establish the preconditions for eliminating war as an instrument of policy on the Continent.

However dubious the military assumptions of the SPD defensive concept, politically it has great attraction for German public opinion in the current European strategic environment. Even the present West German government appears to be having difficulty in attracting and sustaining support within its own coalition for defense spending and military deployments at existing levels. According to its presentation of the national budget for 1990, West German defense expenditures will amount to DM 54.47 billion or (\$32.23 billion), which represent an increase in defense outlays of 2% over the 1989 budget. (It is noteworthy that the West German government describes the defense increase over 1989 as 3.3% by using the figure for actual "89" outlays, which were DM 532.5 million — \$315.09 million — less than the projected budget figure.) But, as depicted in the accompanying graph, defense procurement accounts will actually

fall (by 4%), although R&D is projected to rise by nearly 13%. Most of the *Bundeswehr's* operating costs (allocated at 68% of total defense spending) will be used to enhance personnel accounts (to improve the attractiveness of *Bundeswehr* service) and to protect the environment (for instance, through the creation of new noise abatement procedures and techniques, and the purchase of simulators) and for new weapons program starts. In fact, several major equipment procurements are to be cancelled. These include: purchase of AMRAAM, the NH-90 helicopter, the Franco-German ANS anti-ship missile, the NATO frigate, the *Panzerrichtmine-2* off-route anti-tank mine, Phase II development of the PAH 1 anti-tank helicopter and the advanced short-range air-to-air missile program (from which the Germans have already pulled out). Maintained in the defense procurement budget are the MLRS, MSOW, MSAM and the NATO anti-air warfare system, although the withdrawal of the United States and Great Britain from the MSOW project does not auger well for sustained West German participation. German participation in the European Fighter Aircraft (EFA) program was also sustained, although more for political (to promote European defense collaboration) than for cost-effectiveness reasons. But rising program costs and the possible effects of the CFE process on fighter aircraft inventories could lead to a governmental reevaluation of German participation in EFA. Should the SPD and/or the SPD-Greens win the Federal election in December 1990, German participation in EFA will likely be cancelled, since both parties have committed themselves to pulling Germany out of the program.

While not precisely corresponding to the SPD's concept of a "defensive defense", the current West German government is also moving toward a fundamental revision of the FRG's national defense posture, in part as a result of unfavorable demographic trends and, more importantly, due to the possibility for restructuring its relationship with the East Germans. Together, these factors have combined to force a governmental decision to lower the "operational minimum" of the *Bundeswehr's* peace-time end-strength from a maximum of 495,000 troops to 420,000 by the mid-1990's. What this means for each of the Services is depicted in the accompanying graph; but in aggregate terms the Army is projected to have a force ceiling of 297,000 troops (as compared to its current ceiling of 322,000), while the Air Force will be reduced to a level of 91,200 (from a ceiling of 99,000), and the Navy will maintain a force level of 31,800 (from its current ceiling of 34,500). In addition, the West German Army will retain its current breakdown of three corps and twelve divisions under the force reduction plan, but these forces will be reorganized and will not necessarily maintain their NATO category A-1 designations. Where there are now ten mobile and two air-mobile divisions, in the future there will be nine mobile and three air-mobile divisions, which should allow the Army to respond more quickly with concentrated forces against any point of attack. This type of "quick-reaction" force, which would be maintained according to a high degree of readiness, is assessed as more responsive to

Table 5. 1990 defense budget: Federal Republic of Germany.

	1989 Budget US\$1000	% Share of Budget	1990 Budget US\$1000	% Share of Budget	% Increase over 1989
OPERATING COSTS					
Personnel	13,861	43.96	14,188	44.00	+2.4
Equipment Maintenance and Operations	3,017	9.57	3,101	9.00	+2.8
Other Operating Costs	4,450	14.11	4,580	14.21	+2.9
TOTAL	21,328	67.65	21,869	67.85	+2.5
DEFENSE EXPENDITURE/INVESTMENT					
R&D and Testing	1,740	5.61	1,964	6.01	+12.9
Military Procurement	6,826	21.56	6,526	20.25	-4.4
Military Construction	1,464	4.64	1,702	5.28	+16.3
Other Investments	169	.54	168	.52	-0.6
TOTAL	10,199	32.35	10,360	32.15	+1.6
GRAND TOTAL	31,527	100.00	32,229	100.00	+2.2

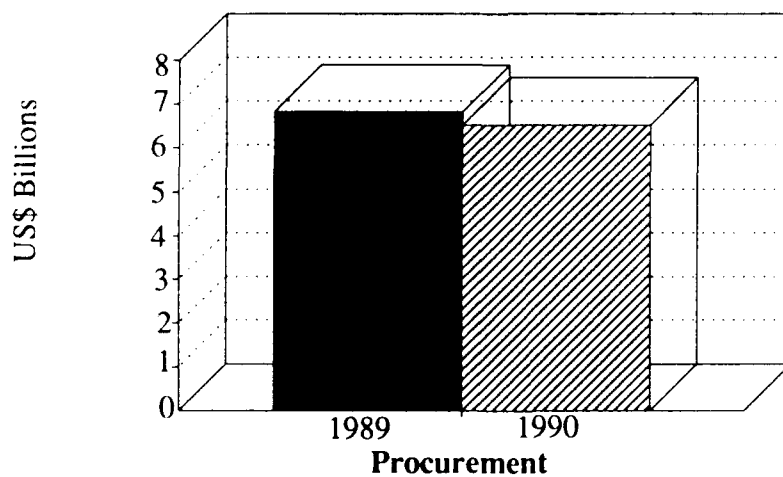
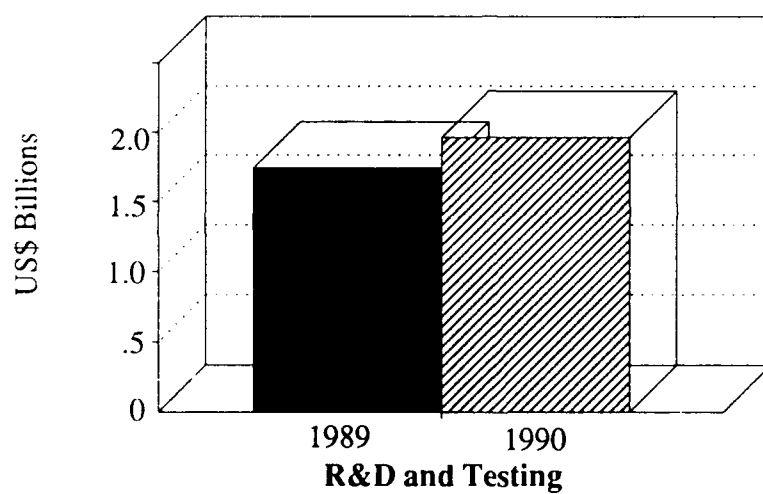
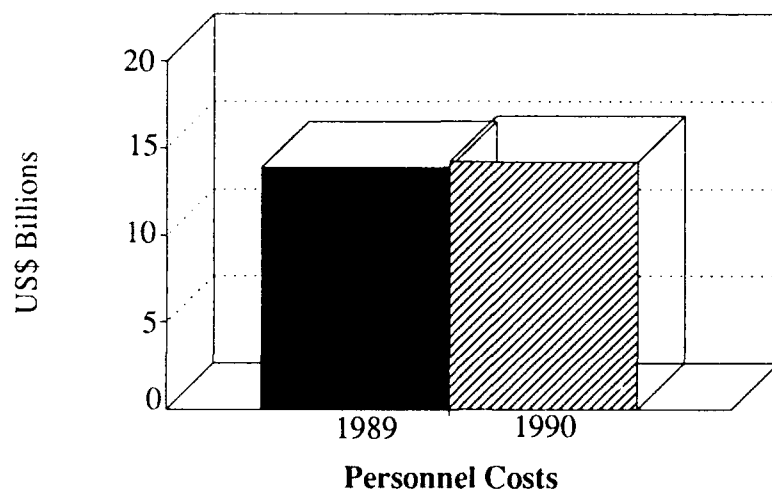


Figure 2. 1990 FRG defense budget outlays by major subcategory.

the emerging European security environment, especially in light of a possible CFE accord. Also under the new plan, six brigades of the Territorial Army's currently established twelve brigades will be completely disbanded, and their equipment designated for use by other Territorial units. Six other brigades will be reassigned to the Field Army, which comes under NATO command in wartime, bringing the Field Army up to a level of forty-two brigades, (as compared to thirty-six at present), although the level of readiness of these forty-two brigades will vary widely. It appears that as few as fifteen of these brigades will meet a 90% staffing requirement. While the reduced *Bundeswehr* ceilings were conceived in the context of a CFE I agreement (along the lines of that which has been proposed by the West at Vienna), the West German military and MOD planning agencies appear to be considering even deeper cuts, based on the assumption that the CFE process will continue and that a Phase II agreement will embody reductions of a magnitude of 50% (of current NATO force levels). If that proves to be the case, it is suggested that West German forces could be further reduced to an operational minimum peace-time strength of under 400,000 troops, perhaps even as low as a 380,000 ceiling. These personnel

Table 6. West German army restructuring.

	OLD PLAN 17 October 1984	NEW PLAN 6 December 1989
TOTAL ARMY ACTIVE MANPOWER	322,000	297,000
NUMBER OF CORPS*	3	3
NUMBER OF DIVISIONS*	12	12
MOBILE	10	9
AIR MOBILE	2	3
NUMBER OF BRIGADES	48	42
FIELD	36	42
TERRITORIAL ARMY	12	
TERM OF MANDATORY SERVICE	18 (Planned)	15

*Not necessarily maintained at NATO A-1 levels

cuts would logically be accompanied by concomitant reductions in equipment levels, which, for the Navy, have been estimated at 43% in the number of combat vessels (in service by the year 2000) or eighty platforms, down from the current inventory of one hundred and eighty-eight. If the German navy is drawn down to this level, its role will likely be limited to coastal defense operations and perhaps some "local" (i.e., Baltic Sea) defensive formations.

Table 7. 1989 SPD party platform positions on defense and security issues; Berlin, December 1989.

- Overcome the system of military deterrence.
- Replace the Blocs with a "European peace order."
- Remain in the Atlantic Alliance until this peace order can be established.
- Seek greater influence in the Alliance to promote "common security."
- Pursue policies leading to the end of stationing of American and Soviet troops outside their own territories.
- Elimination of all weapons of mass destruction and a drastic reduction and restructuring of conventional forces leading toward mutual structural incapacity to attack.
- Acceleration of disarmament through limited unilateral steps and signals.
- Substantial reduction of defense spending and the reduction of troop strength.
- Support for the Bundeswehr and mandatory military service; rejection of compulsory service for women.
- Long-term goal of making military forces superfluous.

Obviously, if the ruling Christian Democratic Party coalition (with the Christian Social Union of Bavaria and the Free Democratic Party of Foreign Minister Hans-Dietrich Genscher) loses the Federal election in December 1990, and either a "Grand Coalition" (of the major Parties) is formed — as some analysts predict — or if an SPD-led government or a "Red-Green" coalition (of the SPD and the Greens) is elected, more drastic cuts and restructuring in the armed forces can be expected. Clearly, the SPD would push for deeper cuts, presumably along the lines of the force structure initiatives that were outlined in their *Progress 90* election manifesto and the *European Security 2000* paper. As indicated above, essentially what the SPD has called for is a manpower ceiling of 250,000 forces, based upon a force structure having a "structural inability to attack" and the creation of what are called "close to the border security areas" which would essentially be demilitarized zones. Some "defensive" armament would be permitted, but not ballistic missile deployments or "other potentially offensive-capable elements," such as, for example, bridge-laying equipment and tanks, within a depth of 100 kilometers on either side of the inner-German border (assuming it still exists by this time next year).

2.3 SNF ISSUES.

The SPD's proposed defense concept calls for the complete elimination of tactical nuclear weapons, although it does endorse a minimum deployment of U.S. strategic-nuclear forces (proponents suggest at levels lower than those currently envisioned to result from the START) to ensure that Western Europe remains under the deterrence protection of the United States (even if sizable numbers of American forces are withdrawn from the European theater). West German critics of the SPD concept point out that these defense proposals will eliminate any possibility of implementation by the NATO allies of a "Flexible Response" strategy. Moreover, they contend that in its place the West would be left with a "throw-back" to the "massive retaliation" concept of the 1950's, without recourse to land-based SNF capabilities. For the United States and NATO defense planners, the frightening aspect of the West German discussion of the SNF issue is that more and more Germans, including policy-makers in the CDU, are closing ranks in support of the view that tactical nuclear weapons, or "substrategic" systems as they were termed in NATO's *Comprehensive Concept* paper, should be withdrawn from West German soil — at least their nuclear artillery and land-based surface-to-surface missile components, although prospective TASM deployments (on NATO strike-tasked DCA) are not "home free" by any means.

Over the summer and into the fall of 1989, West German discussion of SNF issues was muted and virtually "off the scope." Even the visit of Mikhail Gorbachev to Bonn in June 1989 failed to refocus attention on this volatile set of issues. At that time, in private conversations with West German policy officials, discussion of SNF modernization was quickly terminated, with private suggestions from among the most ardent supporters of SNF modernization that the issue was virtually dead, absent a dramatic turn of events in the Soviet Union and Eastern Europe.

In November 1989, with the opening of the "Wall", West German policy officials and defense planners began to suggest publicly what various press reports had earlier proclaimed — namely, that SNF modernization was "politically dead." Even as most of these statements seem to refer almost exclusively to *Lance* modernization, there is a nascent fear among some West German and NATO security analysts that TASM modernization and the deployment of AFAPs will, too, be affected by an evolving German "mindset" that views the SNF issue as the "antithesis" of events on the European Continent. In the current security environment, it is not uncommon to hear West German defense analysts, from all parties, ask somewhat mockingly why NATO needs SNF to bomb Lech Walesa or the government reformers in East Germany. Sentiments such as these, while not militarily logical, nevertheless reflect the emotional nature of the current security debate in the Federal Republic, and, more than this, the political parameters within

which the United States and the NATO allies will have to develop a credible defense and deterrent force posture for the European theater for the next decade and beyond.

With the reemergence of the "German question" as the focus of West German concerns at the moment, it is likewise reasonable to expect growing German pressure within the Alliance for early SNF negotiations. A popular view that is only just emerging in the Federal Republic is that the Vienna process must be accelerated to take into consideration the political developments in Eastern Europe. Against the perceived decline in the military threat from the East, and amidst a widespread West German perception that Soviet arms control proposals are credible, the urge to get rid of what are perceived to be dangerous and unstable weapons systems — either unilaterally or in an arms control forum — is growing, and will not likely decline, unless there is a sharp change in the emerging trends in Eastern Europe and the Soviet Union. Thus, it is likely that West German public opposition to FOTL will affect nuclear-capable artillery, in particular, since the range constraints of these systems are such that they would be used exclusively on German soil (East and West).

Thus far, opposition to TASM modernization appears to be limited to the "left" in the Federal Republic, although that, too, could change depending on the train of events over the next several months in Eastern Europe and the Soviet Union. For the moment, however, West German government defense analysts and politicians appear to support TASM development and deployment on NATO aircraft to supplement the approximate conventional forces parity that is expected to result from the CFE process and to ensure a credible deterrence posture and crisis termination capability for the Alliance. This view is said to coincide with perspectives held by the Soviets, who, according to West German sources, may be interested in retaining some of its European-oriented nuclear weapons as compensation for its theoretical loss of military superiority in the conventional realm.

Table 8. Major elements of allied force restructuring plans: Federal Republic of Germany.

Factors Influencing Changes	Force Structure Implications	Planning Guidance	Procurement Priorities
<ul style="list-style-type: none"> • Disintegration process in Eastern Europe and the prospects for German reunification • Diminished threat perception of the Soviet Union and broad desire to change nature of German role in Western Alliance and in bilateral context with the United States • Reduced support for defense spending and military service but sustained support for NATO and U.S. Deterrence tie • Broader and widespread interest in arms control; and virtually no support for modernized SNF deployment on German soil • Renewed emphasis on German sovereignty and "non-singularity" as guiding concepts for military decision-making 	<ul style="list-style-type: none"> • May no longer require inner-German border forward defense orientation • New defense planning concepts growing in attractiveness • Demographic issues, budgetary constraints and societal pressures (i.e., no service extension from 15 to 18 months) have forced a reevaluation of peace-time <i>Bundeswehr</i> end-strength ceiling (down to 420,000 and eventually perhaps 380,000 troops) • Growing support for a NATO strategy based on "Existential Deterrence" which would embody a minimal SNF deployment, perhaps limited to DCA and "off-shore" platforms 	<ul style="list-style-type: none"> • <i>Bundeswehr 2000</i> <ul style="list-style-type: none"> » Retain 3 Corps/12 division structure of current posture, but increase air mobile divisions by one (3) and reduce mobile divisions by one (9) » Need to maintain Field Army's Brigade structure emphasis but reduced number (48-42) » Some reduction in active force manning levels (as few as 15 Brigades will be manned at 90% level) » Greater reliance on mobilization base infrastructure and reserve forces » Force structure orientation under review in light of fast-paced events in Eastern Europe » New Defensive concepts are under study, including a variant of "Defensive Defense" 	<ul style="list-style-type: none"> • Army <ul style="list-style-type: none"> » MLRS » PAH II » C³ for short-range air defense network » Replacement of <i>Marder</i> MICV • Air Force <ul style="list-style-type: none"> » EFA » MSAM » Improved reconnaissance capabilities • Navy <ul style="list-style-type: none"> » 4 Type-123 Frigates » 332-Class minehunters and 343-class minesweepers » 12 MPR-90 ASW aircraft » Fast-Patrol Boat modernization

SECTION 3 FRANCE

3.1 REACTION TO THE CHANGES IN EASTERN EUROPE.

In France, the dramatic events of November 1989 in Eastern Europe are dominating political discussion and strategic analysis, and ultimately will affect French defense budgeting and acquisition priorities. Of all the West European nations, France, of course, has been the least affected by Europe's "Gorbymania." French skepticism about *Perestroika* and *Glasnost* has its roots in Europe's historical power balance calculus, and in particular, the geo-strategic setting of the Soviet Union, and before it the Russian Empire, on the Euro-Asian landmass. After World War II, French interests on the Continent were directly challenged by Moscow, while Soviet initiatives outside of Europe, especially in Africa and the Middle East, oftentimes clashed with French activities. With the coming to power of Mikhail Gorbachev, French political and defense analysts, by and large, welcomed the change in Soviet diplomatic style, but continued to proceed with caution in defense and foreign policy matters, sustaining, for example, a strong commitment to modernize French national nuclear forces and even moving closer to NATO in the operational and logistical sectors. French analysts have been largely comfortable with the post-World War II "status quo" on the Continent, primarily because it ensured a U.S. troop presence in Europe, which, in turn, offered a solution for managing "the German problem." Hence, the "end of the post-War" period, as the French journal *L'Express* described the events of last November, raises anew for the French traditional worries about the Germans, with specific concern centering on what a reunification of the FRG and DDR would mean for European stability and security frameworks.

Even the preliminary discussions of German unification that are being raised everywhere in West European capitals today provoke French politicians and strategic analysts to react with alarm, resulting in renewed support for existing European and TransAtlantic institutional collaboration. While the French have, since the late 1950s, sought to emphasize their autonomy in defense matters, they nevertheless recognize that the viability of French defense/deterrence forces rests on a global and regional power balance that is dependent upon the Extended Deterrence concept and the capabilities of U.S. forces. More so now than at any other time in the post-World War II period, the French government — because of the changing nature of global threats to Western interests and in light of the uncertainties in Europe — is concerned that a fundamental alteration in the forward deployment of U.S. troops in Europe will upset the evolving power balance on the Continent and give way to a period of instability and heightened conflict potential.

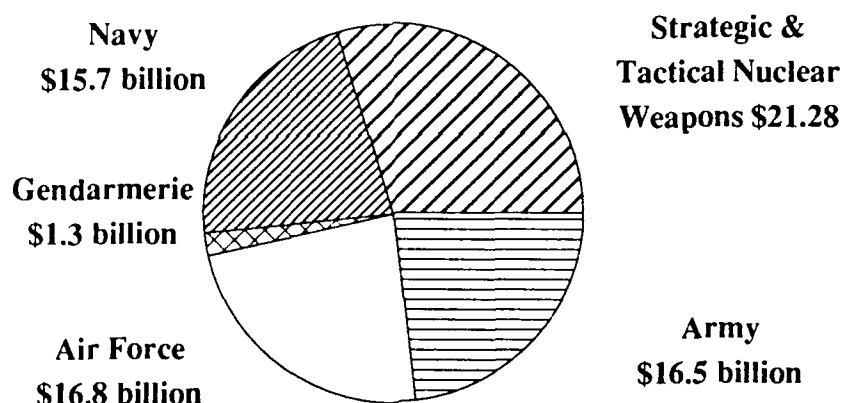
French concern over the future of the U.S. European-based force presence, juxtaposed with a deep anxiety over Germany, has given rise to defense contingency planning — and, more importantly, to political maneuvering — designed to strengthen European collaborative defense cooperation. This ranges from efforts to strengthen the Western European Union (WEU) and Independent European Program Group (IEPG) initiatives, to consideration of revising the European Community's (EC) charter to include defense cooperation. The French have also become noticeably stronger in their tacit support of NATO initiatives, in the apparent hope that the TransAtlantic defense nexus will not be severed either by a unilateral U.S. action (i.e., a substantial troop withdrawal) or as a result of an arms control initiative that, in effect, leads to the dissolution of NATO and the Warsaw Pact. For the moment, however, the French appear to be reassured that neither contingency will occur, given the Soviet Union's own concerns over the future of East Germany and the Warsaw Pact alliance.

Among the most likely near-term scenarios that French analysts project are: (1) an essentially "status quo" situation in which the democratic trends in Eastern Europe are sustained and the existing NATO and Warsaw Pact structures remain intact; or, (2) a "confederation" framework in which East and West Germany co-exist, declare their neutrality, but do not disarm. Under this last conception, the Atlantic Alliance still could exist, but its orientation would be changed to emphasize its political role as a manager of the intricate web of evolving East-West relationships. For the French, these two scenarios are fully consistent with their political interest in promoting greater European unity and augmenting the institutional structures of the European Community. Inimical to these interests would be the three "worst case" scenarios that French analysts discuss (but consider very unlikely). The first, and most frightening to French security analysts, would be German reunification outside the NATO framework, the second would involve the "Balkanization" of Eastern Europe, and the third relates to the fall of Gorbachev and the return to power of the "hardliners" in the Soviet Union. Each of these three contingencies would, according to the French, increase instability and enhance the prospects for conflict in Europe. While, as noted above, French security analysts assign lower probability to these three scenarios, they nevertheless suggest that French (and Allied) defense planning must take account of these possibilities. In the context of their post-CFE defense analyses, the French, therefore, are factoring in defense requirements and weapons acquisition priorities for a fluid and less predictable European security environment.

3.2 BUDGET CUTS AND PROCUREMENT PRIORITIES.

In conversations with French defense analysts and foreign policy officials, it is clear that the events in Eastern Europe will not detract from the defense and weapons acquisition priority enjoyed by French nuclear weapons. Even in the midst of the "general disarmament" mood

adopted by the Socialists (in their defense budget projections for the 1990-93 defense plan or "Programme Loi"), the proposed reduction of 38.7 billion Francs (\$6.08 billion) in the 1987 projection of 476.5 billion Francs (\$74.91 billion) for equipment procurement will still allow for the planned SLBM/SSBN programs, including more accurate, stealth warhead technologies. As the accompanying pie chart illustrates, French nuclear forces continue to be regarded as priority items for funding and modernization, attracting slightly less than one third (31%) of the defense budget's equipment allocations. Even so, the European impetus toward structural disarmament and declining defense budgetary trends has led French government analysts to emphasize a minimal deterrence concept based on strategic sufficiency. What this appears to mean to the French is budgetary priority to SSBN/SLBM modernization. The French appear to attach secondary importance to aircraft platform and missile upgrades at the strategic level, and at the "prestrategic" or tactical nuclear level, to the deployment of the *Hadès* short-range surface-to-surface missile (350 km range and 10-25 kt warhead) and the development of an extended range (1500 kilometer) tactical air-to-surface missile capability (the ASLP), preferably



- I. New Total Defense Procurement Budget 1990-1993: \$68.83 billion.
- II. Original Projected Procurement Budget: \$74.91 billion (making for a change of \$6.08 billion).
- III. Services' Request for 1990-1993: \$76.43 billion (making for a change of \$7.60 billion).

Figure 3. Projected French defense procurement spending 1990-1993.

* The discrepancy between the total program allocations and the funding allotted arises from the additional \$472 million that the MOD will receive from the sale of real estate assets.

in conjunction with the British, who are exploring weapons options for their *Tornado* aircraft. (The French ASLP concept, it is worth noting, currently is based on air-to-ground medium-range missile — ASMP — technologies. The ASMP is entirely autonomous after launch, with a Mach 2-3 speed and 350 km range capability, depending on launch altitude and trajectory profile. Designed to attack heavily defended targets such as air bases and C³ sites, the ASMP is said to incorporate a nuclear warhead in the 150 KT range. It is scheduled for deployment on the *Mirage IV-P* strategic aircraft, the *Mirage 2000N* tactical aircraft, and the carrier-based *Super-Etendard* tactical nuclear aircraft).

The land-based IRBM modernization program has been placed on hold, pending a decision by the Defense Council on the future of the S-4 program. In the 1990 budget, funding for the fixed-based S-4 IRBM developmental program is to be stretched-out, postponing its prospective deployment until the year 2000 at the earliest. At the same time, some members of the opposition Union for the Democracy (UDF) coalition of centrist parties and the right-wing Rally for the Republican Party (RPR) remain committed to development of a mobile IRBM component, the so-called SX program. Yet, it is unlikely, under present circumstances, that the Socialist Government of Prime Minister Michel Rocard will support the SX mobile IRBM concept. Indeed, Rocard may not even endorse development of the fixed-based S-4. For the next three years, funding for a follow-on IRBM will be limited to feasibility studies and program enhancements for the existing S-3 missile (culminating in the S-45, which would have enhanced penetration and survivability characteristics).

Defense budget cuts will, nonetheless, affect French nuclear systems as well as conventional forces. Over the next three years, allocations to the nuclear sector are projected to fall by 5.44% (from their initial allocation in the 1987 "Programme Loi"). In fact, the only program sector to grow, in current French defense spending projections, will be space program authorizations (which are projected to increase by more than 13%). Specifically, funding for the *Syracuse II* communications satellite and the *Helios* reconnaissance satellite will be increased. In addition, the French government has agreed to participate (with Belgium and Sweden) in construction of a *Spot IV* observation satellite, and has committed funds as well (some say up to one-fourth of its available military research budget) to the IEPG's European Cooperative Long-Term Initiative for Defense — known as EUCLID.

3.3 RESTRUCTURING FRENCH FORCES.

In sharp contrast, most French Army programs have been curtailed or drawn-out in the 1990-93 defense budget allocations. Included in the Army cuts is the *SANTAL* mobile anti-aircraft system (for potential use against helicopters and low-level aircraft attack), which will be cancelled

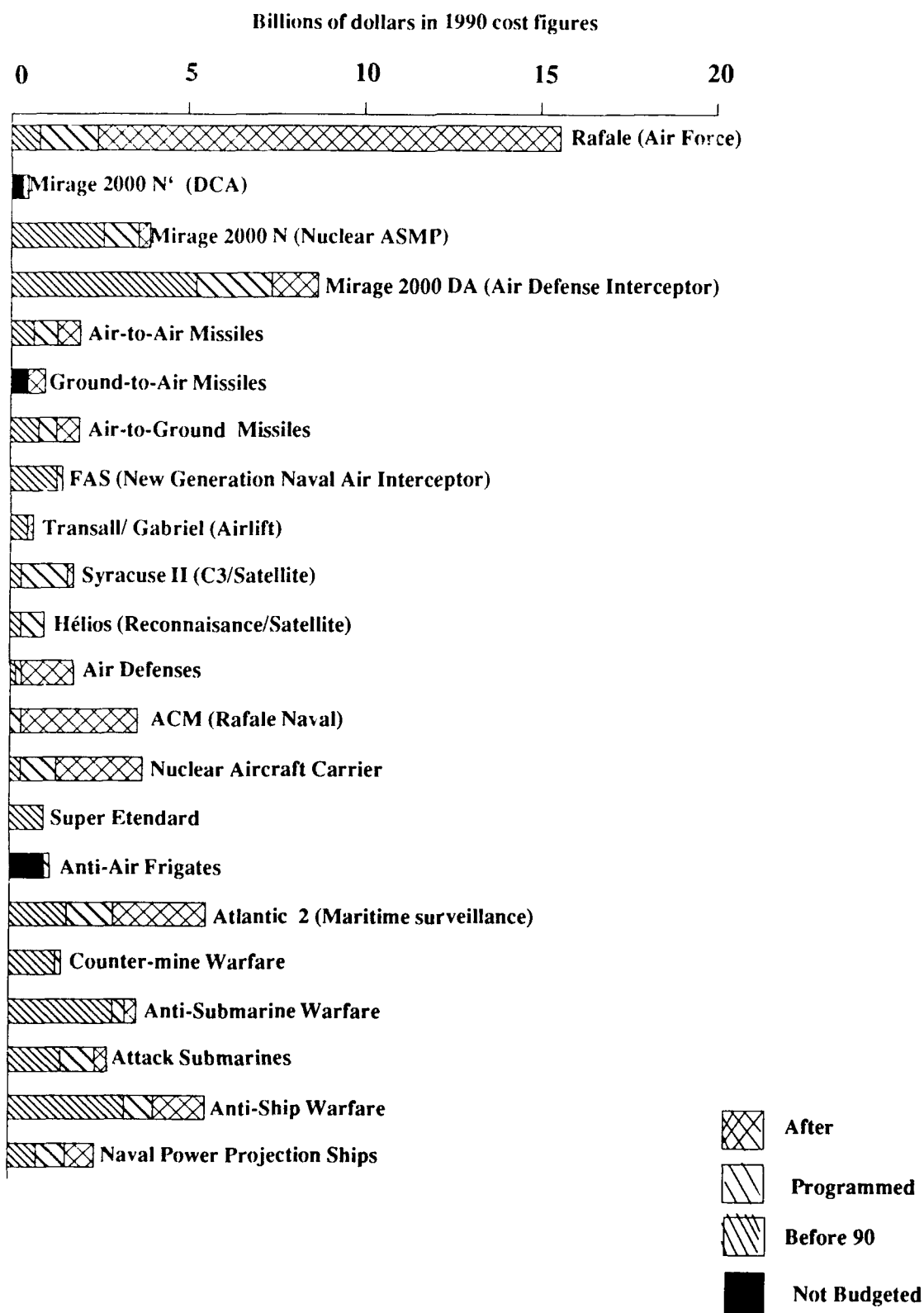


Figure 4. Major Program Allocations (in billions of Dollars).

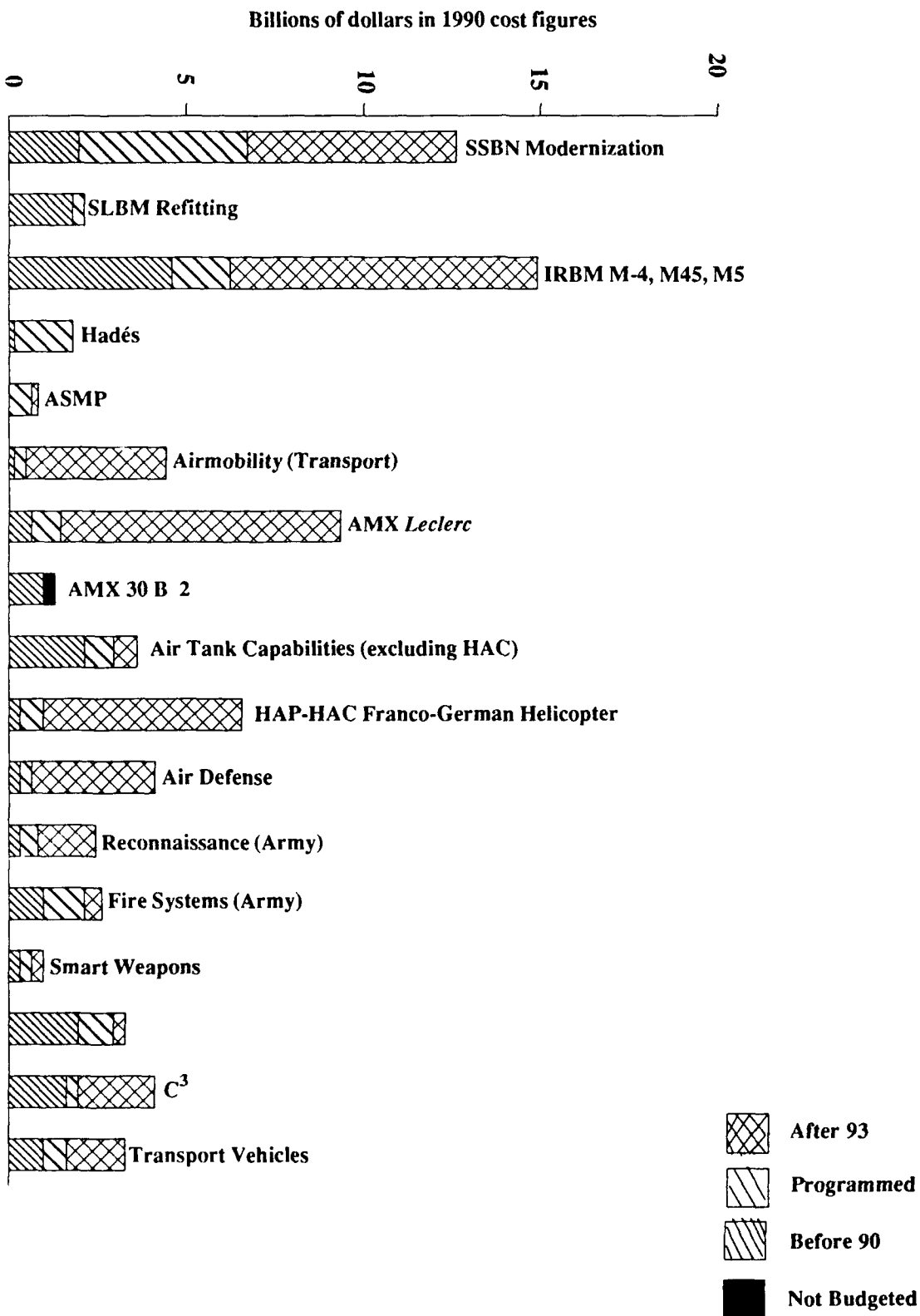


Figure 5. Major Program Allocations (in billions of Dollars).

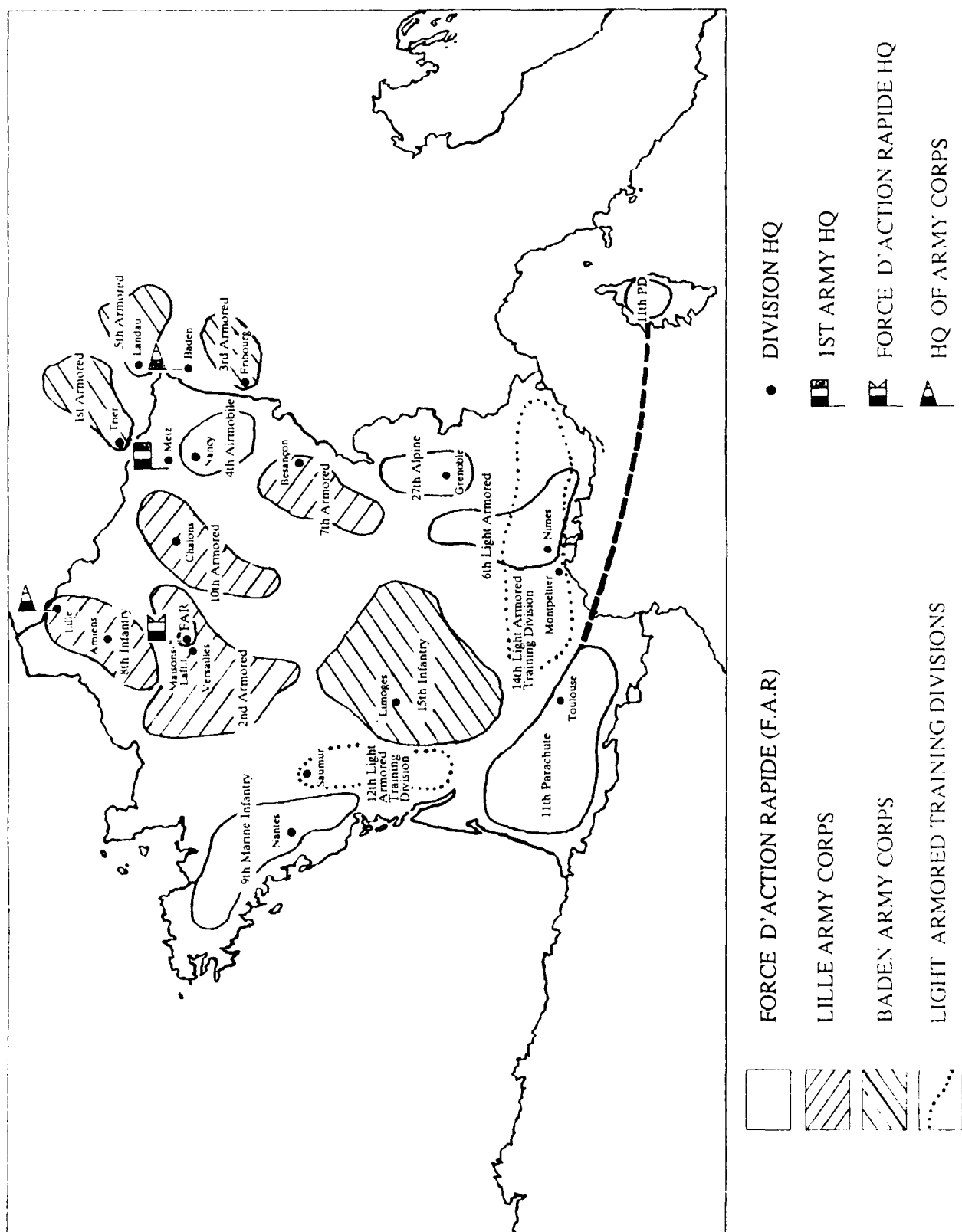
altogether, as well as the B-2 tank program (the updated version of the AMX-30), bringing down its inventory number to the 712 that are already on order (as compared to the 811 that the Army had wanted). In addition, the Army's advanced future tank program, the *Leclerc*, is to be scaled back from 1,400 to probably fewer than 1,000 copies, if that. Also cut was the planned procurement of 110 155mm artillery/drawn cannon launchers, in favor of augmenting (from 28 to 89) the planned acquisition of the MLRS launcher. The official rationale for cutting out or delaying Army programs is based on the need to hedge against the anticipated results of the Army's reorganization study (called *Army Plan 2000*), changes enacted in the national service laws, and finally, the elimination in basing infrastructure and the consequent reorganization of French operational territorial forces. However, in reality, while each of these factors certainly figures into French defense analytical assessments, it is the projected impact of the CFE process, more than anything else, which is driving French defense budget assessments and, coincidentally, helping to define the recommendations contained in French *Army Plan 2000*.

Even though the broad outlines of French *Army Plan 2000* have been known for sometime, the Parliamentary debate on the defense budget bill afforded an opportunity for a more detailed look at the proposed changes to French Army structures. As depicted in the accompanying chart, the *Plan* provides for the reorganization of French ground forces to include the creation of two Army Corps (instead of the three which currently exist), with staff headquarters in Baden (FRG) and Lille (France), while retaining the Rapid Action Force elements. The Metz Army Corps staff is eliminated and its elements redistributed between the two remaining Corps. (It is widely speculated that the Lille HQs was retained as a political favor to Socialist Party General Secretary Pierre Mauroy, who is also the Mayor of Lille.) To facilitate operational planning with the Tactical Air Force (FATAC), the First Army Staff is to be transferred from Strasbourg to Metz (nearer to Guise and the FATAC staff's "wartime" headquarters). The most significant change of *Army Plan 2000* is the replacement of the territorial defense structure to emphasize three specialized zones instead of the four military, air, maritime, and gendarmerie regions. The new zones, which are depicted on the accompanying map, (Page 31) are: (1) the North-Northeast Defense Zone, designed to deal with Central European contingencies; (2) The Atlantic-Paris Defense Zone, designed to address SLOC protection; and (3) the Rhine Valley and Mediterranean Zone, designed to focus on Southern Europe and perhaps, even, out of area (i.e., North African) contingencies. The limits of these latter two zones have not yet been definitively fixed, but proposals for their respective parameters have been submitted by the relevant chiefs of staff.

These changes in operational command structures are being undertaken with the purpose of increasing forces' effectiveness, while being responsive to force posture changes in terms of both organization and force levels. Thus, Army military and territorial command structures will

Table 9. Impact of "Army 2000".

	Current	Future
<h2>Armed Forces</h2>	<ul style="list-style-type: none"> • Army Corps, HQ in Strasbourg • FATAc HQ in Metz <ul style="list-style-type: none"> — 6 squadrons totalling 270 aircraft • Three Army Corps (HQs in Metz, Baden and Lille) • FAR (Maisons-Laffite/Paris) <ul style="list-style-type: none"> — 4th Airborne Division (Nancy) — 9th Marine Infantry Division (Nantes) — 27th Alpine Division (Grenoble) — 11th Parachute Division (Toulouse) — 6th Light Armored Division (Nîmes) 	<ul style="list-style-type: none"> • 1st Army Corps and FATAc HQs at Metz • 1 Army Corps (HQ in Baden) <ul style="list-style-type: none"> — 1st Armored Division (Trier, FRG) — 5th Armored Division (Landau) — 3rd Armored Division (Freibourg) — 15th Infantry Division (Limoges) • 2 Army Corps (HQ in Lille) <ul style="list-style-type: none"> — 2nd Armored Division (Versailles) — 10th Armored Division (Châlons-Sur-Marne) — 7th Armored Division (Besançon) — 8th Infantry Division (Amiens) • FAR (no change) • FAR (Stationed in Eastern France) • 15 Army units, 9 of which are regiments, to be disbanded
	<h2>Defense Organization</h2> <ul style="list-style-type: none"> • 6 Military Regions (Army) • 4 Air Districts <ul style="list-style-type: none"> — Paris — Metz — Bordeaux — Aix-en-Provence • 3 Naval Districts <ul style="list-style-type: none"> — Brest — Toulon — Cherbourg • 6 "Gendarmes" Districts • 22 Territorial Divisions 	<ul style="list-style-type: none"> • 3 Defense Zones for the Army <ul style="list-style-type: none"> — Northeast (Metz) — Atlantic (Bordeaux) — Mediterranean (Lyon) • 3 Regional Air Districts <ul style="list-style-type: none"> — Villa-Coubly (Paris) — Metz — Aix-en-Provence • 2 Naval Zones <ul style="list-style-type: none"> — Atlantic (Brest) — Mediterranean (Toulon) • Paris will be autonomous • About 10 territorial divisions



shrink and the new military command structures will correspond more closely to the civilian administrative structures, which, until now, have been superimposed on them. Further changes to the Army's operational and administrative structure are nevertheless anticipated, due, in large measure, to projected reductions brought about by the CFE process.

In contrast to the French Army, the French Navy and the Air Force are essentially "locked" into the major equipment modernization programs that presently dominate each Service's funding considerations. For the Air Force *Mirage* modernization and *Rafale* production are twin priorities, while for the Navy carrier replacement (of the *Foch* and *Clemenceau*) forms the highest agenda item. With the Navy's carrier replacement program comes a need to modernize sea-based French TAC/AIR assets, which include the *Super-Etendard* nuclear-capable bomber and the *Crusader* interceptor aircraft. French planners apparently decided on a naval version of the *Rafale* for replacement of the *Super-Etendard*. While modernization of the *Crusader* remains a technological imperative (these aircraft were designed in the 1950's and deployed in the early 1960's), cost considerations and a delayed IOC for the *Rafale* have raised the need for an "intermediate" or stop-gap capability. The two options under consideration by the French Navy are: (1) a service-life extension program for the *Crusader*; and (2) purchase of fifteen, used, American F-18 aircraft. While the French Navy prefers the American option, cost and political (French industrial) considerations favor a service-life extension program. According to budget estimates of the National Armaments Directorate, the *Crusader* SLEP option would be 1,200 million Francs (\$ 197 million), plus an additional 530 million Francs (\$ 87 million) for armament. This compares to 3,360 million Francs (\$ 551 million) for purchase of the F-18 and an additional 375 million Francs (\$ 61 million) for armament. If Dassault (the manufacturer) keeps to its cost quotes, which some in the French Navy think is not likely, the SLEP option, based on *Mirage* and *Rafale* technologies, would save the French government 2 billion Francs (\$ 328 million).

Clearly, some civilian Ministry of Defense officials appear to prefer a SLEP for cost reasons and probably because of the potential implications of an F-18 purchase for the *Rafale* program and French industry. But, as expressed to IFPA in a recent interview with a prominent French defense analyst, there is a concern that *Rafale* will not compare favorably with the F-18, creating, at the very least, resistance to its replacement of the *Super-Etendard*, and perhaps more importantly, contributing to a higher cost *Rafale* program. This, in turn, could provoke, it is said, a reassessment of the Navy's overall *Rafale* buy and result in lower numbers of aircraft to be procured (86). The F-18 flight test aboard the *Foch* is currently scheduled for February 1990, and a decision on an interim solution will not likely be made before the Spring, but the transfer in October of Vice Admiral of the Fleet Guirec Doniol, one of the F-18's most ardent proponents,

from his naval air supervisory position to the *Matignon* (the Prime Minister's office), where he has become a counsellor on defense issues, may be an indicator that the French industrial view will prevail on this issue. One compromise that has been mentioned by the Minister of Defense, Jean-Pierre Chevenement, is purchase of the F-18 now, putting off *Rafale* procurement for both the *Super-Etendard* and the *Crusaders* until 2004, when a simultaneous Navy and Air Force *Rafale* procurement could take place (thereby, hopefully, lowering production-run costs).

The Rocard-Chevenement budget cuts, force level reductions and equipment procurement draw-outs, then, have been a focus of controversy among French politicians and strategic analysts during the last half of 1989. In the National Assembly, the powerful Chairman of the Defense Commission, Jean-Michel Boucheron, a Socialist, raised publicly questions about the defense funding priorities of the Services and suggested that French military planning assumptions are outdated. And, in a recently published and widely acclaimed book (entitled *Tous Azimuts*), Régis Debray, a prominent Socialist Party Member and a former government counsellor, raised fundamental questions about the orientation and future planning of French defense policy. Likewise, opposition party defense analysts, such as former French Ambassador François de Rose and François Fillon, RPR deputy from Sarthe, have questioned the apparent inconsistencies between French equipment procurements and France's doctrinal concept (of the ultimate warning) for nuclear weapons. These criticisms are representative of a growing debate over French defense priorities and concepts that threatens to erode the much vaunted national defense consensus on which the French government has based its defense policy since 1959 and the founding of the Fifth Republic. The extraordinary measure of the Government's having to revert to a Constitutional article designed to force a closure vote in Parliament on the defense bill further reflects the erosion of consensus in France on military issues.

Table 10. Major elements of allied force restructuring plans: France.

Factors Influencing Changes	Force Structure Implications	Planning Guidance	Procurement Priorities
<ul style="list-style-type: none"> • Disintegration process in Eastern Europe and prospects for German reunification • Defense spending trends are consistent (just under 4% of GDP), but due to inflation purchasing power is diminished • On-going European arms control process and prospective CFE cuts • Interest in promoting greater European defense collaboration (through the EC and IEPG) • Restructuring of Soviet theater forces, including nuclear assets and defensive networks • "Out-of-Area" interests and the prospects for regional conflict outside of Europe and global weapons proliferation 	<ul style="list-style-type: none"> • Commitment to Proportional Deterrence over French sanctuary, with prestrategic warning employment possible before French borders are breached • Social, demographic and budget constraints, but national consensus on strategic nuclear autonomy • Sustained priority to nuclear force modernization and support for exclusion of French nuclear forces from regional arms control regimes • No interest in explicit nuclear guarantee to West Germany • Continued support for American deterrence guarantee to Europe, but dubious about NATO structure and future orientation of Germany (Franco-German brigade) 	<ul style="list-style-type: none"> • Priority to on-going nuclear force modernization • Changes to Army Force Structure under <i>Army Plan 2000</i> <ul style="list-style-type: none"> » Corps elimination » Streamlined Defense Zones » Consolidation of Air Force and Army HQs • Requirement for rapid deployment, intervention capabilities • New emphasis on Space • Promote French and European industrial concerns, including arms sales 	<ul style="list-style-type: none"> • Nuclear <ul style="list-style-type: none"> » New SSBN class » M-45 deployment and M-5 development » ASMP-ASLP (<i>Mirage</i>) » <i>Hadès</i> • Army <ul style="list-style-type: none"> » MLRS » Helicopters (HAP-HAC) » Enhanced C³/I » <i>Leclerc</i> • Air Force <ul style="list-style-type: none"> » <i>Rafale</i> • Navy <ul style="list-style-type: none"> » Aircraft carrier modernization » TAC/Air modernization (<i>Rafale</i> and <i>Super Étendard</i>) • Space <ul style="list-style-type: none"> » <i>Hélios</i> (Reconnaissance) » <i>Syracuse II</i> (C³) » <i>Spot IV</i> (Reconnaissance)

SECTION 4 UNITED KINGDOM

4.1 REACTION TO CHANGES IN EASTERN EUROPE.

As in the FRG, France and other NATO European countries, defense and national security perspectives in the United Kingdom have been deeply influenced over the last six months by the fast-moving events in Eastern Europe and the Soviet Union. Similar to their counterparts in France, government analysts in the British Ministry of Defense and the Foreign Office are hesitantly supportive of the changes taking place in Eastern Europe and the Soviet Union, but most appear to agree as well that the nature of the future European security environment remains obscure, in part because the prospects for instability have been heightened by uncertainty as to how events will play out in the Soviet Union. Among some quarters in the MOD, in particular, there is serious concern over Gorbachev's position in the Soviet Union. Obviously, anything that affects Gorbachev's position will influence the pace and nature of change in Eastern Europe, and, for this reason alone, defense analysts in the British government are inclined to emphasize the continued relevance of the Warsaw Pact as an instrument of stability in Eastern Europe. In this context, some British defense analysts express concern over their perception that the American government appears to have written off the Warsaw Pact, especially after the Malta Summit. In contrast, these same British analysts emphasize that the Warsaw Pact may be a useful instrument to oversee the historic transformation in Eastern Europe. More importantly they feel that it offers the Soviet Union an acceptable framework for managing the transition of the German-German relationship, in much the same way as NATO does for the Western allies.

British interest in perpetuating both the NATO and the Warsaw Pact alliances appears to have been reinforced in early December 1989, as a result of several statements made by Soviet President Gorbachev during separate meetings with French President François Mitterrand and West German Foreign Minister Hans-Dietrich Genscher. According to British (and French) government officials, on several occasions Gorbachev reiterated to his guests the strategic importance of the DDR to the Soviet Union and to stability in Europe. While British analysts suggest that the meaning of Gorbachev's message lies in the eyes of the beholder (i.e., one of several different target audiences, including the disgruntled Soviet military), they also imply that Chancellor Kohl's ten-point blueprint for reunification may not be acceptable to Moscow. In this context, it is suggested that the NATO allies need to work together to develop a constructive approach to German reunification (under whatever framework the Germans themselves choose to establish). For the moment, however, it is said that Mrs. Thatcher's preoccupation is with the inherent instability that is more than likely to accompany the

disintegration process in Eastern Europe. British analysts forecast the possibility of conflict and crises between and among historic rivals -- i.e., Romanians-Hungary, Polish-German, and Yugoslav-Albanian -- and expect that the NATO allies may have to intervene (perhaps with the Soviets) to help control and diffuse the situation. Thus, at present she is said to oppose Alliance discussion of German reunification for fear that it would encourage less desirable trends on the Continent.

4.2 FORCE RESTRUCTURING PROGRAMS.

In general, official British reaction to Secretary Baker's Berlin initiative appears to be positive, although there is some concern that the much discussed restructuring of American forward-based forces, outside of the CFE process, could result in precipitous decisions by NATO European states to cut into Alliance force structure before CFE reductions can be apportioned and their implications (for NATO strategy and force posture) precisely assessed. On the specific issue of British force restructuring, British defense analysts claim to have no study underway comparable to, for example, the French *Army Plan 2000* or West Germany's *Bundeswehr 2000*. There is, of course, new attention to the ten-year *Long Term Defense Plan*, which encompasses a weapons procurement architecture for the next seven years, beyond the presently-projected three-year equipment procurement and force structure plan. Specifically, the British MOD, based upon its assessment of competing, hypothetical scenarios, is seeking to construct an equipment procurement program that will not be prejudiced by any particular set of developments, but which will be sensitive to those factors likely to have heightened importance in the emerging European strategic environment. In this context, it should be noted that the British defense budget projection, while sensitive to global strategic developments, is shaped principally, nevertheless, by the European defense calculus. Thus far, preliminary work is said to suggest some of the obvious in terms of defense planning requirements for the year 2000 and into the twenty-first century. Initial British assessments, for example, delineate a need for far greater mobility on the battlefield (manifested probably in a greater emphasis on helicopter and transport capabilities for use both within theater, as well as for moving from one theater to another), for enhanced surveillance and reconnaissance capabilities (to guard against surprise attack scenarios, although this is thought to be a less than credible option in a post-CFE European theater), for highly automatic C³ and high-speed decision-making structures, and for enhanced industrial-mobilization capabilities.

Among the British military and in defense analytical circles, with only a few exceptions, there appears to be little support for those who argue that the heavy, main battle tank has had its day. In fact, the British Army is currently evaluating three candidate systems -- a *Challenger* follow-on, the U.S. M-1 and the West German *Leopard II* -- to update British tank inventories.

(The British Army has stated a procurement requirement for 600 new tanks at a cost of £1.4 billion or \$2.24 billion.) The only question seems to be not whether the capability remains relevant in a post-CFE Europe, but — depending on how many copies are ultimately to be purchased (this, a factor of cost, CFE-imposed cuts to national inventories, and gun capability) — whether it makes sense to purchase an “off-the-shelf” model or to enter into a collaborative program with another interested NATO ally. As with other Western nations, defense equipment procurements in the future will be determined more and more on the basis of systems’ costs and the prospects for collaborative programs (based, increasingly, on trans-national consortia rather than strictly nationally-based collaborative efforts.) Thus, for example, it is likely that trans-national industrial teams will be formed to compete in multiple national procurement competitions, probably against other British companies operating in rival consortiums with other extra-national industrial partners.

4.3 DEFENSE SPENDING TRENDS AND PROGRAM PRIORITIES.

For the next three years, British defense analysts project a cash growth of approximately one billion Pounds (\$1.63 billion) per year in equipment expenditures, making for total estimated

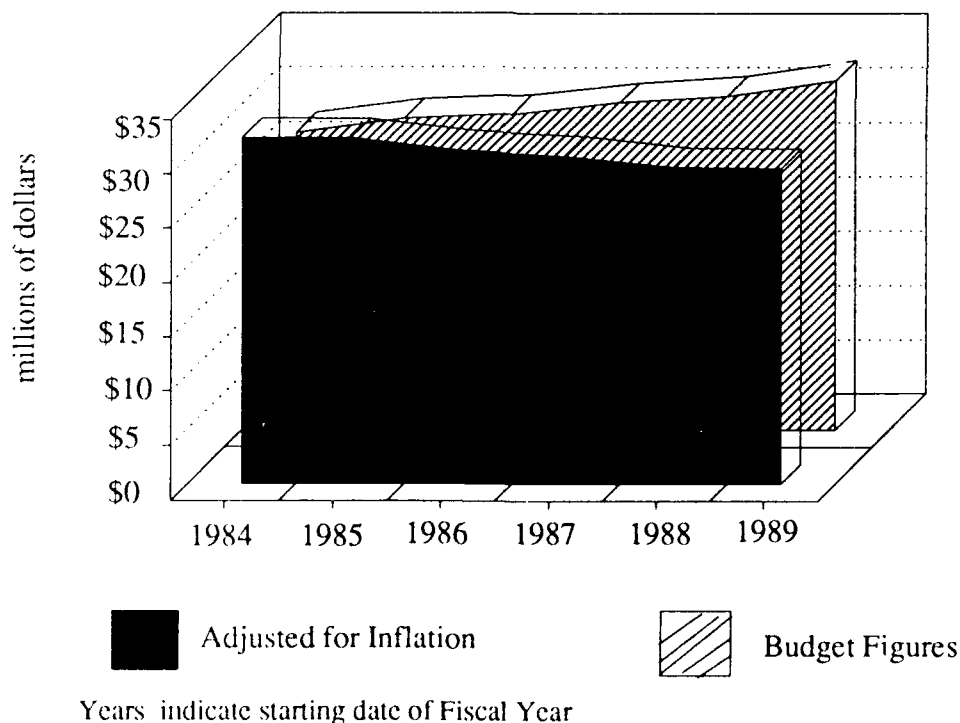


Figure 7. UK defense expenditure: Impact of inflation.

defense expenditures of approximately £21.2 billion (\$34.7 billion) in cash terms in 1990, £22.35 billion (\$36.16 billion) in 1991, and £23.43 billion (\$38.4 billion) in 1992. This translates into an increase, for the latter two years, of 1.9% and 1.7%, respectively. For 1990 however, due to inflation, a 0.6% decrease is expected unless the projected unspent excess beyond the "out-turn" of the current 1989 budget (of £20.31 billion or \$33.4 billion) is turned over and added to the 1990 budget estimate, thereby bringing next year's spending to the 1989 level, resulting in a no growth (but not a negative growth) budget projection for FY90. If, as the government presently projects, the British inflation rate falls to around 5%, there could then be an increase in defense expenditures of 2% at the end of the 1990-93 three year period. However, with the current inflation rate running at about 8%, most defense analysts and British economists do not realistically expect the inflation rate to drop to 5%, and predict, therefore, a steady rate of spending with, in the best of circumstances, a modest increase. This, in turn, has given rise to a weapons procurement philosophy that is designed to obtain the best value for the available money, reinforcing the emphasis on "off-the-shelf" purchases and collaborative efforts. It also has reinforced a tendency to look at each potential collaborative project very carefully, and to cancel those that do not meet hard and fast military design and cost criteria

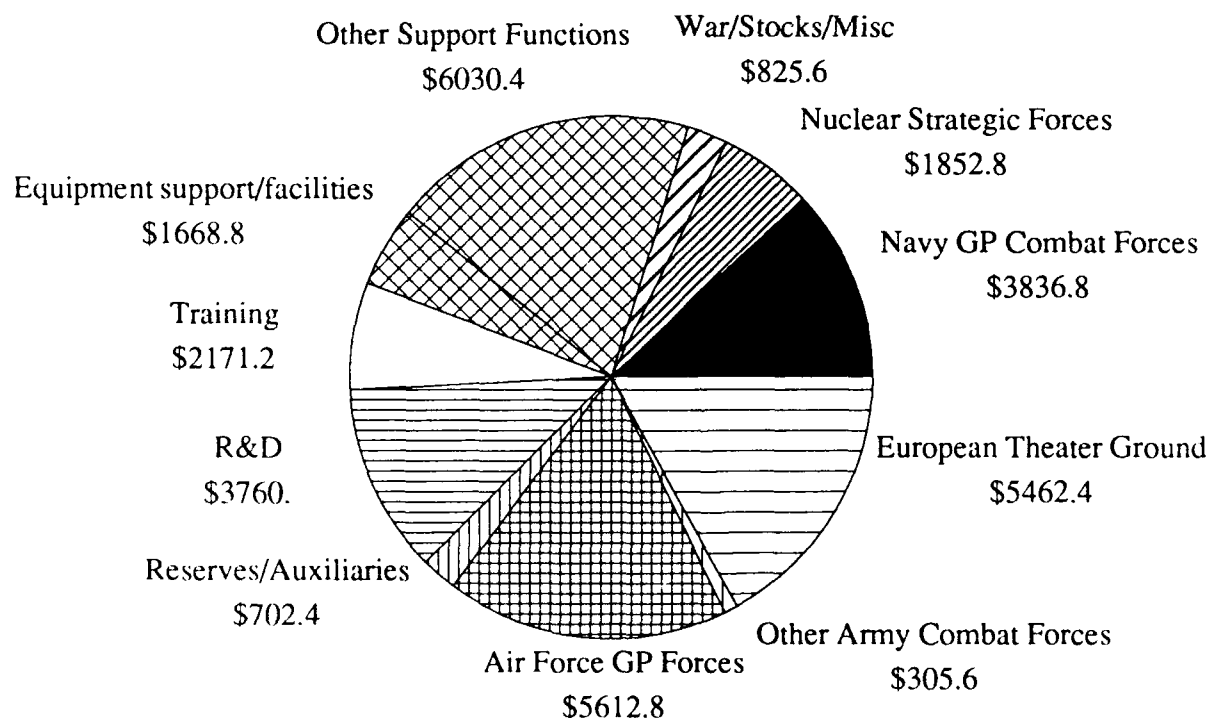


Figure 8. UK defense estimates 1989-1990: Analysis by program areas.

(including construction schedules) as, for example, in the case of the NATO frigate program (from which the British have withdrawn, despite the Royal Navy's desire to participate in the program).

Among the collaborative ventures to which Britain is likely to remain committed over the next ten years are the European Fighter Aircraft (EFA) and a new generation, nuclear-capable tactical air-to-surface missile (TASM). As regards EFA, the British requirement for a modern air defense interceptor capability is not assessed to have changed, even in the event of a CFE agreement (which many in British defense planning circles think can be readied for signing by October 1990). The need for a British nuclear-tipped TASM, too, is not seen as affected by CFE I, although the prospect of an early SNF negotiation, it is admitted, could affect planning requirements for launch numbers and deployment modalities. On the whole, the official British perception of a TASM requirement is related to NATO's deterrence concept as articulated in the *Comprehensive Concept* guidelines adopted at the NATO Summit in May 1989. In this sense, interest in TASM is not unrelated to Britain's support for FOTL, although most MOD and Foreign Office officials hold to a view that the deterrence requirement for *Lance* modernization will probably need to be reexamined in 1992, after the West German Federal election and in the context of changes in the European security environment. There is a general feeling that further Alliance discussion of *Lance* modernization at this time would be counterproductive, and should be put off until 1992. This is not to say that NATO's High Level Group (HLG) should not go forward with its current nuclear weapons studies, but rather that perhaps the time-tables for the more controversial deliverables (i.e., those dealing with the unresolved SNF issues) should be pushed back to allow the Germans some "breathing space" on SNF-related issues.

4.4 TASM/FOTL AND SNF NEGOTIATIONS.

There is emerging in British defense circles a school of thought which sees the need for a major Alliance debate on nuclear deterrence requirements in Europe for the 1990's. While the British do not want to be perceived in Alliance circles as the "hold out" in an SNF compromise, major reservations do appear to exist in the U.K. regarding a potential "grand concorde," in which the Allies forfeit *Lance* modernization in return for German acceptance of TASM deployment, even though many in Britain seem to feel that TASM is ultimately more important than FOTL (although it is conceded that the systems' comparison ranks with the "apples and oranges" metaphor). The rationale for such a trade-off, it is admitted, is not difficult to comprehend. TASM, after all, has greater systems' flexibility than would a ground-based surface-to-surface missile capability, and for this reason (because it theoretically can target Soviet as well as East European aim-points) may, over the long run, have greater relevance for the evolution of

NATO's deterrence concept. Moreover, since deterrence is a political-psychological concept just as much as it is a strategic-military notion, the capacity, in political terms, to be able to threaten Soviet territory without recourse to the use of U.S. and British (or French) strategic-nuclear weapons forms the important "bottom-line" of British thinking on a possible FOTL/TASM trade-off. In this context, nuclear AFAPs have almost no currency in British thinking, and have been described as an arms control "bargaining chip," although, on more than one occasion, British officials have noted in recent months that the negotiation of NATO's nuclear artillery was *not* expected to bring much from the Soviets in an SNF negotiation. All things considered, therefore, few in the British government wish to be forced into a choice between *Lance* modernization and TASM, since rejection of FOTL very likely could become the beginning of a decision process leading as well to the ultimate rejection of TASM modernization. On the other hand, proposals to locate a contingency deployment of FOTL in the UK has not gained any significant degree of support within either official or unofficial circles in Britain. This option cannot be considered among any likely compromise outcomes on the FOTL deployment question.

At this point in time, British TASM options are three — either the U.S. SRAM-T or SLAT technologies, or the French ASLP, a systems' technology that is related to the current generation ASMP (see the French section of this Report). On the basis of a MOU with the United States, the British are still in the process of evaluating the American technology options, although a preliminary result appears to be a British preference for the Martin-Marietta SLAT over the Boeing SRAM-T (the USAF preferred solution). The SLAT derivative is said to better fit British requirements, although the French ASLP is being viewed with greater interest as well, primarily because of the political ramifications of selection by the British of the French candidate. For Mrs. Thatcher, whose record on European integration is under fire at home as well as in the EC, choice of the ASLP could help to alleviate some of the political pressure directed at 10 Downing Street by the British 'EC 92' and European integration constituencies. At the same time, it could also demonstrate her independence from the United States — without damaging fundamentally that relationship — at a time when many in Britain perceive an erosion in U.S.-U.K. relations and a strengthened partnership between the Americans and the West Germans (part of the dubious legacy of the NATO *Comprehensive Concept* debate). Together, these two factors may form a logical and convincing rationale for a British selection of ASLP.

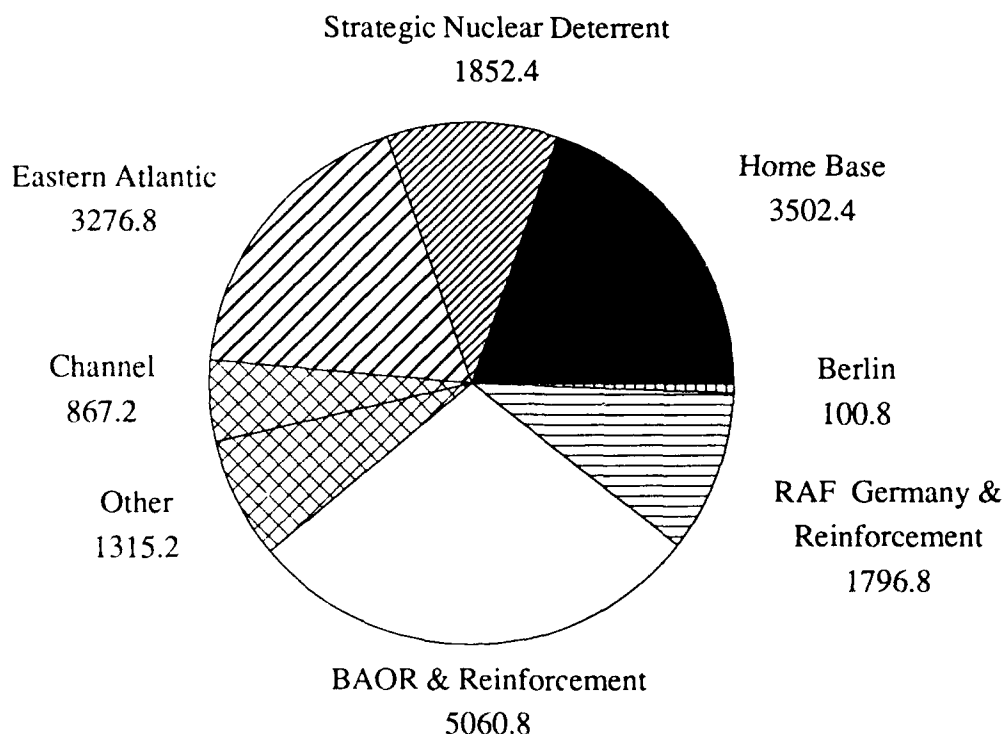
What is rather surprising, however, is to hear MOD officials say that the French system may indeed meet British military criteria for a nuclear TASM, including requirements regarding performance, cost and time-schedule. Apparently, the French have convinced some in the MOD that ASLP can effectively be made to fit British needs (although the U.S. options are slightly

better from a strict military-operational perspective), and that the political benefits of its choice would far outweigh any military-operational shortcomings, especially now that the British time-frame for deployment has slipped to the year 2000 (at the earliest) based upon the projected time for designing a low-observable warhead. Yet, even if the French candidate is chosen by the British, London, it seems, would still prefer to utilize a U.S. test site for warhead testing (for a future nuclear-tipped TASM), since use of French South Pacific test ranges would open a Pandora's box of difficulties with Australia and New Zealand. Warhead development too, may be problematic for several reasons, including access to critical nuclear materials. In this regard, there is concern that the warhead production requirements for the *Trident* program may affect negatively the TASM schedule. Moreover, the Aldermaston Nuclear Weapons Establishment (where British nuclear warheads are assembled) has recently experienced personnel problems (staffing shortages), resulting in production "backlogs" and failure to meet delivery schedules. As a result, the Thatcher Government is apparently considering making Aldermaston "semi-autonomous" so as to be more competitive with the private sector and alleviate the personnel issues.

4.5 CFE ISSUES AND FORCE RESTRUCTURING.

From an official British perspective, nuclear requirements in a post-CFE I environment in Europe are unlikely to change very much from the present, since the rationale for NATO nuclear forces is far broader than the force posture relationships between nuclear and conventional force balance calculations. Politically, the problem of deterrence in post CFE-I Europe, it is said, will be one of providing for a credible deterrence structure that takes into account the need for systems variety (to assure survivability) and flexibility (to meet a range of targeting requirements), all within the context of a politically acceptable nuclear force posture. As with the CFE process in general, this will raise fundamental questions concerning the relationships between Allied force structures and collective Alliance defense/deterrence requirements. For many British defense analysts, this is the major problem of the day, and needs the immediate attention of Alliance decision-makers. Thus far, British defense officials have resisted an internal debate on how best to harmonize national needs with Alliance requirements, although a looming "manpower" shortage, especially in terms of the retention of trained officers, may prompt force structure changes outside of the CFE process. Already, over the last year, due to declining birth rates and reduced retention levels, the overall personnel strength of the British armed forces dropped by 8,000, bringing the total forces ceiling down to 307,806 troops. Due to a decreasing number of volunteers and a growth in competition for qualified job applicants from the civilian sector, the Infantry has been hardest hit among British Army units, with a current shortfall of some 1500 troops. Overall, the Army is reported to be understaffed by some 4100 trained officers and men,

one result of which has been the disbanding of three companies of a battalion of the British Army of the Rhine (BAOR) stationed in West Germany. In FY90 approximately 750 officers, many of them from the junior grades, are expected to leave the Army (as compared to 638 who left in FY89) for more lucrative jobs in the private sector. To improve the Army's position in the "manpower" area, the Government has implemented changes in regulations (such as lowering the height requirement for recruits into the Brigade of Guards by roughly two inches) to allow for greater flexibility in recruitment. Consideration also is being given to a broadening of the role of women and civilian professionals in non-combat areas (i.e., assignments to logistical structures), although there appears to be little support either in the Services themselves or in the MOD to utilize women on as broad a basis as does the United States in its armed forces. In addition to women, the British government also is planning to increase its recruitment of minorities. But as with the broader utilization of women, these "stop-gap" measures will probably not relieve MOD officials of the need to consider more carefully further force ceiling reductions in the context of post-CFE planning calculations.



Figures in millions of Dollars

Figure 9. UK defense estimates 1989-1990: Analysis by commitments.

Table 11. Major elements of allied force restructuring plans: United Kingdom.

Factors Influencing Changes	Force Structure Implications	Planning Guidance	Procurement Priorities
<ul style="list-style-type: none"> • Disintegration process in Eastern Europe and diminished Soviet threat perception • Northern Ireland and rise in unconventional warfare incidents, and terrorist activities, including against the BAOR • Demographic issues and lack of interest in military career options among younger recruits and officers • No growth budget projection due to inflation, increased "manpower" costs, and diminished popular support for defense spending • Renewed interest in the East-West arms control process • "Out-of-Area" theaters changing due to sophisticated weapons proliferation and increase in chemical warfare capabilities 	<ul style="list-style-type: none"> • National deterrent force remains central element of force structure • European balance calculus is key factor in force planning • Volunteers base for force structure will be maintained • NATO strategy and Forward Defense concept must be sustained, thereby providing rationale for new MBT acquisition • Continued commitment to upgrading passive and barrier-type defenses at military facilities • Greater requirement for naval point defenses, perhaps even against third country ballistic missile technologies 	<ul style="list-style-type: none"> • <i>Long Term Defense Plan</i> <ul style="list-style-type: none"> » Greater Battlefield mobility » Theater lift assets critical » Improved surveillance/reconnaissance capabilities » Advanced C³I systems and networks » Enhanced industrial base/mobilization infrastructure imperative • U.S. force commitment to NATO necessary to give credibility to Extended Deterrence concept • A nuclear "firebreak" in Europe is essential 	<ul style="list-style-type: none"> • Nuclear <ul style="list-style-type: none"> » Trident procurement (4) and warhead modernization » TASM » Stealth warhead technologies • Army <ul style="list-style-type: none"> » MLRS » Challenger (and gun) follow-on » Helicopter assets (combat and lift/scout) • Air Force <ul style="list-style-type: none"> » EFA » Hardening and other passive defense programs • Navy <ul style="list-style-type: none"> » Procurement of three Type-23 Frigates (to maintain surface fleet at 50 platforms) » ASW capabilities » Ship-based missile systems • Royal Marines <ul style="list-style-type: none"> » Amphibious Assault Landing Ships (LSDs)

SECTION 5 THE NETHERLANDS

5.1 THE SEPTEMBER ELECTIONS: CHANGES IN KEY MOD POSITIONS.

Central to evolving defense policy in the Netherlands during the last half of 1989 was the election of a successor to the center-right Christian Democratic/Liberal Party (CDA/VVD) coalition government, which fell in May. Briefly stated, the issue upon which the coalition faltered — at least at the surface — was a relatively small aspect of the extremely complex financing plans for a comprehensive National Environmental Program. Of overarching significance, however, was a breakdown in internal cohesion within the junior partner Liberal Party, the more conservative of the two parties in the center-right coalition. The Liberal Party, which has supplied the defense minister in the Dutch government since the elections of 1986, found itself divided between its parliamentary membership and its senior, cabinet-level ministers. Parliamentary members had begun to question the effectiveness of their own ministers in advocating Liberal Party policies within the coalition, particularly on such issues as the economy and taxation.

This criticism, however, was not by and large focused on Frits Bolkestein, the Liberal Party defense minister at the time the cabinet fell; Bolkestein, who had expressed an interest during the summer campaign in continuing at his post at the Ministry of Defense, was held in generally high regard by both coalition parties. Given the background of the coalition's breakdown, therefore, and the major issues upon which the election subsequently focused, it was not surprising that Dutch security perspectives did not play a decisive role in shaping the outcome of the election. However, as the coalition agreement was debated and finalized between the parties of the new government, there could be little question that the policies of this government — a center-left coalition comprised of the CDA and the Dutch Labor Party (PvdA), with Ruud Lubbers continuing as Prime Minister — could have significant and long-term implications for both the structure and capabilities of Dutch forces, as well as for the Dutch role in the Alliance.

Prime Minister Lubbers, it is worth noting, had refused definitively before the September 6 election to serve in a cabinet led by the Dutch Labor Party. As it turned out, he had no need of making good on this threat, as the CDA was returned to parliament as the largest single party with 54 seats in the lower house of the new parliament (the same as its delegation in the outgoing parliament). The PvdA, on the other hand, did not perform as well as many observers had thought would be the case when the election opened, dropping three seats to a delegation of 49. A surge in popular support for strengthened environmental policies was not capitalized on by

the Dutch Labor Party, but instead by the smaller parties in Holland's political spectrum — most notably the so-called Green Left, a coalition of four small leftist parties (but not including the official Dutch Green Party, which did not elect any of its members to the lower chamber). Green Left doubled its parliamentary representation from three to six; the small Democrats '66 party increased its delegation from nine to twelve. The clearest losers in the election were the Liberals, whose delegation shrank by five seats from 27 to 22.

With this outcome, the CDA/VVD coalition would still have been able to hold on to a slim, one-seat majority (76 out of 150) in the lower chamber; but given the state of relations between the CDA and VVD after the fall of the government in May, and in view of the precipitous fall in popular support for the Liberals, Lubbers opted to forge a coalition with the Labor Party, with whom he has a greater natural affinity.

Given the CDA's position as the single largest party, and the PvdA's somewhat weaker-than-expected performance at the polls, Lubbers was able to keep the upper hand in the formation of the new cabinet, remaining Prime Minister. Hans van den Broek, the CDA Foreign Minister of the two previous Lubbers-led governments (since November of 1982), also remained in his post. Key Labor posts went to Wim Kok, the PvdA leader, who will now serve as Deputy Prime Minister and Finance Minister, and to Relus ter Beek, appointed Defense Minister. At the junior minister level, Jan van Houwelingen, the

highly effective CDA State Secretary for Defense (the number two position in the MOD), has now been replaced by Berend Jan-Marie Baron van Voorst tot Voorst, also a CDA member. Ter Beek, who had been serving as the Labor Party defense spokesman in parliament, adheres to the newly resurgent moderate line adopted by the PvdA on issues of defense and security, reflecting a shift away from the hard-line, anti-deployment stances taken by Labor leaders during

Profile: Relus ter Beek

- **New Dutch Defense Minister**
- **Labor Party (PvdA) Member; moderate**
- **45 years old**
- **Key PvdA defense perspectives:**
 - » **zero growth in defense budget**
 - » **reduce NATO's reliance on nuclear weapons; "shift concept" an acceptable means of doing this**
 - » **forego purchase of attack helicopters, prefer leasing PAH-1 from FRG**
 - » **cancel or scale back recent procurement decisions made by CDA/VVD government (*Crotale* air defense, *Leopard I* modernization, F-16 attrition replacements)**

the debates over deployment of U.S. INF forces in the Netherlands. Although this move back toward the center of the defense policy debate was a key element of the PvdA's return to a place in the governing coalition, it is by no means certain that the "conversion" of the PvdA is a permanent one. Upcoming debates over procurement policy in the context of CFE force structure cuts — and the prospect of renewed Allied controversy over SNF policy once a CFE I accord is in sight — may well push the Labor rank and file to the left on defense once again.

5.2 CHANGES IN DUTCH DEFENSE SPENDING.

During the summer election campaign, the centrist CDA set forth a platform calling for a 0.6% increase (in real terms) in defense spending for fiscal year 1990. This position was a step back for the CDA from the proposed defense budget for next year, which was ultimately submitted to parliament by the outgoing center-right coalition in early September. That proposal had called for a 1.2% increase in FY 90 over the current defense spending level of Fls14.12 billion (\$6.4 billion). In calling for the smaller 0.6% growth figure in its election platform, the CDA was returning to earlier plans first formulated in September 1988, which had called for modest growth (0.6%) in 1990, followed by a stepped-up growth rate of 2.0% in 1991. By returning

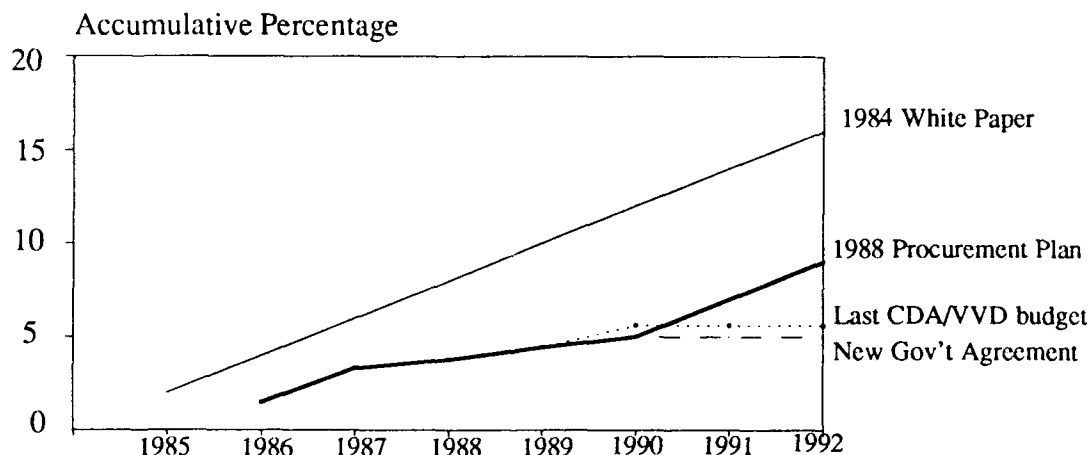


Figure 10. Dutch defense spending: Comparison of recent plans.

to these proposals, rather than standing by the last budget proposed by the CDA/VVD coalition, Lubbers' Christian Democrats were seen by some analysts to be trying to meet the Labor Party halfway on the defense budget, given the call in Labor's campaign platform for zero growth in the defense budget (and the widespread expectation by mid-summer that Labor would indeed be joining the governing coalition after the general election). When the coalition agreement between the CDA and PvdA was finalized, reports indicated that it had set 0.6% growth in defense spending as the goal for 1990-1991, to be followed by zero growth for the two fiscal

years thereafter (1991-92, 1992-93). Soon after details of the agreement were circulated and the new center-left government was installed, however, it seemed apparent that even the 0.6% growth for next year may be threatened by other considerations — notably, by increasing parliamentary pressure in the Netherlands to respond to perceived changes in the European security environment, and the continuing political pressure in Holland to narrow the Dutch budget deficit.

5.3 IMPACT OF BUDGET CHANGES ON PROCUREMENT.

These changes to Dutch defense spending plans will have a negative impact on the ability of the Netherlands to carry out many key aspects of the major procurement programs announced last year for all three major services as part of the 1989-98 procurement plan. Based on a comparison of current plans with the last CDA/VVD defense budget (in other words, with a much more optimistic budget than is likely to be settled upon by the new CDA/PvdA government), Dutch defense spending will *at best* be some Fls1.2 billion (\$545 million) *below* expected levels for the period 1989-1995. Indeed, CDA/VVD plans already had called for significant cuts in planned equipment budgets for both the Dutch Navy and Air Force.

In coming months, defense budget cuts will almost certainly be increased by the new CDA/PvdA coalition, with the 1989-98 procurement plan likely to be revised significantly in a new defense *White Paper* — the first such comprehensive review of defense plans and commitments since 1984 — scheduled for release by the end of 1990. A new *White Paper* will set the tone for Dutch defense policy under the new CDA/PvdA coalition, and can be expected to call for a less ambitious long-term procurement program, based on perceived changes in the European security environment and anticipated force reductions mandated by the CFE process. More specifically, a number of major acquisition projects now under consideration are likely to be identified as candidates for cancellation or delay. These would include:

- The planned purchase of 50 attack helicopters for the Dutch Army. This acquisition, programmed for Fls1.7 billion (\$773 million), had progressed far enough along that as recently as April 1989 the focus of debate was on which of three competing systems to procure. One group, led by key members of the former cabinet, favored satisfying the attack helicopter requirement through participation in the Italian/British/Spanish Light Attack Helicopter (LAH) project, known as *Tonal*. Jan van Houwelingen, State Secretary of Defense under the outgoing CDA/VVD government, was a strong exponent of this option (and of European collaborative projects generally), yet the Dutch have historically considered a wide range of both NATO-European and transatlantic alternatives in such major systems procurement decisions. While collaboration with European partners is valued by

the Dutch, a number of concerns have begun to mount regarding the prospects of success for the LAH. Holland has required that the configuration selected for the LAH be able to carry the TRIGAT anti-tank missile, and has insisted that no changes be made to the development/production timetable (given Dutch concerns over a "gap" in its battlefield antitank capabilities). Holland is also watching British concerns over the project carefully, and should Britain withdraw from LAH participation (which some analysts anticipate early in 1990), Dutch planners would likely be strongly inclined to do likewise.

With the coming of the new government, and the prospect of tighter defense budgets, Dutch planners are increasingly beginning to examine the possibility of leasing existing systems to fill the immediate Dutch requirement for attack helicopters. Van Houwelingen's replacement, Baron van Voorst tot Voorst, is thought to be considering the possibility of the Dutch leasing — or perhaps even buying at discount rates — systems scheduled to be withdrawn by the United States as part of a CFE agreement. This would swing the Dutch choice of systems toward the McDonnell-Douglas AH-64 *Apache* system, an option which had also been favored by a number of key members of the former coalition partner VVD. At the same time, members of the new coalition partner PvdA (particularly Bram Stemerdink, a former Labor Defense Minister) have advocated instead an arrangement with the Federal Republic of Germany under which Holland would lease some of the FRG's PAH-1 helicopters. Stemerdink's argument is that it would make little sense to introduce a helicopter system into the Dutch Central Front forces that does not have commonality with the West German forces at nearby Central Front positions. This PvdA preference follows West Germany's proposal to have the Dutch double their production stake in the four-nation NH-90 utility helicopter program, with West Germany in return lending Holland a number of PAH-1 attack helicopters and permitting Dutch entry as a partner into the advanced PAH-2 project (currently under development by France and West Germany). Under the German proposal, the entry fee for Dutch participation in the advanced helicopter project would be waived, and the PAH-1 systems would be loaned at no cost.

It seems doubtful, however, that the new center-left coalition, already seeking savings in the Dutch defense budget, will accept a doubling of Holland's stake (from five to ten percent of development costs) in the NH-90 project; additionally, the decision of the Kohl government to cancel FRG participation in the NH-90 has removed the underlying premise of the arrangement. This may be why van Voorst tot Voorst is investigating the *Apache* option with more interest. Despite the planned cuts in the Dutch defense budget (noted above), van Voorst tot Voorst has indicated his view that the helicopter buy should proceed — though this may prove to be a point of contention between the coalition partners. In the

State Secretary's view, leasing the *Apache* systems from the United States would improve Dutch tactical flexibility and interoperability with other NATO forces. Moreover, though the U.S. systems might have a higher up-front cost, total costs of the systems over their service life in the Dutch forces are projected to be less than those of the PAH series. While the West German option presents a lower up-front cost, total costs over service life appear to be higher — and the potential returns to Dutch industry lower. Finally, there is a general sense throughout Dutch planning circles that a final decision regarding attack helicopters can wait until a clearer picture of the future threat emerges from the CFE talks. This would also seem to weigh in favor of the *Apache* option.

- The modernization of Holland's *Leopard I* tanks. This upgrade program, which has been a major element of plans for the Army since 1987, now appears to be among the most likely targets of cost-cutting measures. In July, the outgoing government announced a compromise program under which only 342 of the Royal Netherlands Army's 468 *Leopard I-V* MBTs would be modernized with improved hydraulics, a new fire control system and improved thermal imaging equipment. The remaining 126 unmodernized tanks (thought to be the number of Dutch tanks likely to be withdrawn from service as a result of the CFE talks) were to be decommissioned and kept in storage for utilization in emergencies. Moreover, because the modernization program did not include upgrading the armor strength on the older *Leopard Is*, it was noted by van Houwelingen in announcing the project that the systems would not be sufficient for offensive operations after the mid 1990s, and would accordingly be withdrawn from armored battalions and placed with infantry units for fire support.

When this project was presented in July, it was clear that the Fls900 million (\$409 million) cost of the modernization program made necessary the review of the program by the government that would be elected in September. It is now considered unlikely that the program will be funded; alternative proposals may be forthcoming from the new government, involving the upgrading of a smaller portion of the Army's *Leopard Is*, but there is some sentiment among the PvdA members of the coalition that the modernization program would result in spending "a huge amount of money in patching up these tanks," in Stemerding's words.

- The purchase of 14 *Crotale* air defense systems for protection of Dutch airbases. This procurement choice, the outcome of a strongly contested competition between the *Crotale* and the U.S.-developed ADATS system, was made by the Ministry of Defense, but never endorsed by any political party. When it became apparent that no contract had been signed on behalf of the Dutch government before the fall of the CDA/VVD government, it seemed

clear that the \$132 million acquisition would be a likely target for defense reductions by the new coalition.

- The Thomson-CSF ATILA 2 field artillery command and control system, acquisition of which was planned for the Dutch Army, was also put on hold during the coalition talks and is presently in an uncertain state. The program, worth \$76.5 million, is intended to supply the Army with an advanced communications system for fire control on the battlefield.
- Replacements for attrition losses in the Dutch Air Force's fleet of F-16 aircraft will not be ordered. In presenting its last defense budget before leaving office, the outgoing center-right CDA/VVD coalition had recommended foregoing the replacement of 18 F-16A/B aircraft in the Dutch inventory which have crashed since deployment of the system began. This was a significant step back from long-standing plans to replace 16 of the lost aircraft through additional purchases; as late as July, reports circulated that the Dutch still intended to go ahead with the purchase of ten aircraft as replacements for attrition losses at a cost of Fls225 million (\$122 million). However, a drop in the loss rate of F-16s, coupled with the expectation that the need for attrition replacements will be sharply curtailed by the impact of combat aircraft reductions mandated by a CFE agreement, apparently has undermined the rationale for the outlay of increasingly scarce defense resources on additional aircraft.

5.4 IMPACT OF BUDGET CHANGES ON POTENTIAL SERVICE MISSIONS.

The impact of reductions to the Dutch defense budget arising from the changing budgetary priorities of the new center-left government will also have an impact beyond the scope of specific procurement choices and programs. Perhaps more important in terms of long-term trends in Dutch force structure and capabilities are decisions now being made by the center-left coalition that will shape the ability of the Dutch services to fulfill the requirements of a number of mission areas. Moreover, choices that increase or decrease the emphasis placed on various mission areas will reflect evolving defense perspectives and priorities of the new Dutch leadership coalition. It seems inevitable that in grappling with these choices, the long-standing theme of "task specialization" will take on increasing importance. Simply stated, "task specialization" advocates argue that the small countries within the Alliance should abandon defense plans under which each tries to accomplish more than it can afford; instead, it is held, smaller countries should focus on those missions and defense industrial sectors in which they have a clear advantage, sharing the financial and manpower responsibilities for large mission areas that cannot be satisfied by one or two Alliance states. While the concept of "task specialization" claims wide support from Dutch defense elites throughout the political/security perspectives spectrum, the *application* of the concept — that is, choosing the winners and losers — is far

from realizing a consensus. Moreover, it must be remembered that closely related to the question of which *missions* to emphasize lies the issue of which *defense industries* to support (and which, by implication, to allow to decline); in other words, the evolving industrial policy of the new government may well play some role in bringing about "task specialization," whether or not the impact on defense capabilities is acknowledged in this way.

Traditionally, much of the debate in the Netherlands has focused on maritime missions and the maritime services. The new coalition partner, the PvdA, is reported to favor emphasizing Dutch surface vessels (chiefly frigates and minesweepers) over maritime patrol aircraft and the small Dutch submarine force. This emphasis is linked to the Dutch Labor Party's industrial policy, which seeks to maintain the profitability of Holland's remaining shipbuilding interests. Former PvdA Defense Minister Bram Stemerding was quoted in September 1989 as saying that both the naval aviation and submarine aspects of the overall Dutch defense effort were too small and costly to be maintained, especially sub construction capabilities. Stemerding suggested some sort of "task specialization within NATO" as a possible response to what he sees as the near-term abandonment of these roles. The views of the new Dutch Defense Minister, Relus ter Beek, may or may not align with Stemerding's on this point, but increased scrutiny of the cost effectiveness of the Dutch maritime forces — together with a new review of prospects for paring down the Dutch Marine corps — may be anticipated from the new center-left government.

Particular attention may be focused by the new governing coalition on proposals to develop a standing NATO maritime patrol air force (MPA) throughout the North Atlantic and North Sea approaches. Such a force would be developed along the lines of the NATO Airborne Early Warning Force (NAEWF) or the Standing Naval Force Atlantic (STANAVFORLANT) currently in operation. These forces carry out assigned missions utilizing multinational squadrons, staffed and funded by participating NATO countries. In the case of airborne maritime patrol, countries in the Alliance currently undertaking this role individually, and which might thus be participants in a collaborative effort, include the United States, Canada, the Federal Republic of Germany, the Netherlands, and Norway; financial participation by Belgium, Denmark, France, Iceland, Italy, Luxembourg, Portugal, and Spain is also envisioned. Such an undertaking would accord with PvdA desires to see Holland abandon its own attempts to maintain an independent MPA force. Some support for this concept might also be found within the CDA, which has been skeptical for some time over the relative utility of Holland's MPA contribution, most especially the nuclear ASW role.

With respect to the Dutch submarine forces, the first indication of the future prospects of this force may have been given by the last CDA/VVD defense budget of mid-September 1989, in which the proposed acquisition of replacements for two *Zwaardvis* submarines was delayed

indefinitely. These submarines will now be expected to operate until the end of the century, and will not be replaced by the purchase of additional *Walrus*-class submarines. In taking this step, the former government may have simply been paving the way for its successor to re-evaluate the future of the Dutch submarine forces. Yet at the same time, reports over the last few months indicate that a joint task force of the Dutch Economic Affairs and Defense ministries has recommended the restarting of development work on the *Moray*-class diesel-electric patrol submarine being developed by the RDM yard in Rotterdam. The Dutch government is apparently prepared to invest up to Fls44 million (\$20 million) toward an overall technical development cost of Fls65 million (\$29.5 million), on the condition that a sufficiently large export market can be determined and cooperation with foreign shipyards (most likely in France, Sweden, or Spain) is pursued by RDM. Even given this government support of the *Moray* program, however, Dutch acquisition of the system is questionable — despite the likelihood that the Navy may soon determine a requirement for two such craft to supplement the *Walrus* boats now entering service.

5.5 THE NEW DUTCH GOVERNMENT AND SNF MODERNIZATION PERSPECTIVES.

As described in prior IFPA reports for DNA, Dutch security planners and policy-makers have long played key roles in the formation of Alliance-wide consensus on a broad range of issues associated with the modernization and deployment of NATO short-range nuclear forces (SNF). Dutch perspectives, for example, played an important role in shaping the outcome of the Montebello decision of October 1983, as well as in developing the compromise formula on SNF policy outlined in the NATO summit communiqué of May 1989. Guiding the efforts of Dutch defense officials in an Alliance context has been what they call the “shift concept,” which (briefly stated) accepts the need for short range nuclear forces in NATO’s deterrent posture, while seeking to change the nature of NATO’s SNF force posture — through the dual approaches of arms control and limited modernization — toward fewer, longer-range, higher-capability systems.

Within the Dutch domestic political debate, the socialist PvdA party, during its lengthy (seven-year) period in opposition, had adopted a number of increasingly extremist positions with respect to defense generally and nuclear weapons specifically. Although less critical of *Lance* modernization *per se* than their counterparts in Belgium and the FRG (partly because current *Lance* deployments were originally approved by the last PvdA-led government), Dutch Labor leaders have called for negotiations directed toward the reduction or elimination of SNF forces to be held in parallel with the current CFE talks on conventional forces. This position was underscored by PvdA leader Wim Kok in meetings with President Bush and Secretary of

State Baker in July 1989 during the President's trip to Europe (which included a stop in The Netherlands). Spokesmen for the Labor party leader indicated in reports following the meeting that a Dutch government in which the Labor party participated would adhere to the principles of the May communiqué and the NATO *Comprehensive Concept*, while still insisting on "speedy negotiations" for SNF. At present, the SNF issue has not yet proved a point of dissension between the two parties in the new coalition. It seems clear, however, that key officials of the new center-left government — most notably Foreign Minister van den Broek — are likely to be considerably more cautious than in the past in seeking to forge and maintain the tenuous Alliance consensus on SNF systems, given the lack of clear agreement within the new government on the priorities to be sought on SNF arms control and modernization.

With respect to the question of specific SNF systems, it is clear that any SNF deployment decided upon by NATO will, from the Dutch perspective, need to be "arms control friendly." In some MOD quarters, this is seen as favoring (for example) a nuclear-dedicated launcher for a follow-on to *Lance* (FOTL) system, incorporating clearly distinguishable features from potential non-nuclear system variants. To some degree, this would ease concerns expressed by a number of Dutch parliamentarians concerning selection of the multiple-launch rocket system (MLRS) as the launcher platform for FOTL, since Dutch procurement of MLRS was sold to Parliament on the basis that it would be used for conventional weapons only. For the moment, however, preference for a dedicated launcher remains a minority view at the MOD, and most senior defense planners still envision a FOTL concept based on a dual-capable platform. Still, should NATO decide to deploy a FOTL system during the term of the CDA/PvdA government (a development which is viewed in The Hague as unlikely at present), the recent "moderation" of PvdA defense policies could be severely tested, resulting in greatly increased tensions within the coalition. The same could be said, although perhaps to a lesser degree, with respect to the potential deployment of tactical air-to-surface missiles (TASMs) on NATO nuclear-capable aircraft (particularly if Dutch F-16s were involved). Although TASM is seen by most in Holland as a less controversial replacement system (in contrast to FOTL, which is seen as a new, and hence more politically charged, mission decision), elements of the PvdA party and parliamentary leadership share the opinion of left-of-center politicians elsewhere in NATO Europe that TASM is a circumvention of the "spirit," if not the letter, of the INF Treaty. Labor Party parliamentarians also have criticized a recent proposal by Dutch strategists to improve TASM survivability by deploying it on V/STOL aircraft (such as the *Harrier*), arguing such deployments could be more destabilizing precisely because they would render TASM a more effective and credible nuclear warfighting asset. No modernization decision is likely to be approved, moreover, that does not explicitly allow for the opening of East-West negotiations aimed at the further reduction — if not ultimate elimination — of SNF inventories on both sides.

Table 12. Major elements of allied force restructuring plans: The Netherlands.

Factors Influencing Changes	Force Structure Implications	Planning Guidance	Procurement Priorities
<ul style="list-style-type: none"> Continuing Dutch concerns over budget deficit; defense spending identified as a target for cost-cutting measures by the new center-left government Sharply increased public concerns over environmental issues Public perception of a declining security threat from the Soviet Union/Warsaw Pact Participation of anti-SNF Labor Party in government may "harden" Dutch SNF stance and reduce support for NATO modernization Growing interest in arms control, including early SNF negotiations 	<ul style="list-style-type: none"> Continued emphasis on Central Front deployments CFE will make available systems from other (chiefly U.S.) inventories that could be purchased/leased cheaply to satisfy specific requirements (e.g., attack helicopters) "Task specialization" may bring into question future of specific service missions (e.g., maritime air patrol, surface coastal patrol) Greater reliance on simulators, fewer exercises and "live" training time Validation of unique Dutch mobilization structure (the RIM system) MOD and General Staff reorganizations to facilitate integrated, longer-term (15 or 20 years) and short-term (5 year) planning 	<ul style="list-style-type: none"> <i>On the Road to 2005</i> (Dutch Army Plan) <ul style="list-style-type: none"> emphasizes mobility and maneuver capabilities counter-attack capability/offensive operations in the forward area exploit advanced conventional technologies in firepower to improve lethality and decrease manpower requirements enhance survivability/effectiveness of C "Shift Concept" <ul style="list-style-type: none"> change the nature and size of NATO SNF arsenal toward fewer, longer-range weapons through modernization and arms control 2:1:1 ratio of defense spending <ul style="list-style-type: none"> ensure the continued predominance of the Army over other services recent budgets actually increase the amount devoted to the Army Industrial Policy <ul style="list-style-type: none"> importance of Dutch government's goal of maintaining specific defense-relevant industries (shipbuilding, advanced electronics, aerospace) 	<ul style="list-style-type: none"> Army <ul style="list-style-type: none"> Attack helicopters (currently on hold) Procurement of advanced fire control C₃ (now on hold) Navy <ul style="list-style-type: none"> Emphasis on frigates and coastal mineweepers (to be produced with Belgium); decreasing emphasis on submarines Air Force <ul style="list-style-type: none"> Mid-life upgrade for F-16 force Increasing interest in acquisition of simulators for training and command post exercises

SECTION 6 ITALY

6.1 THE NEW GOVERNMENT AND DEFENSE BUDGET CHANGES.

In July 1989, Italy's forty-ninth government since World War II was sworn in, commanding the attention of political and strategic analysts over the summer vacation period. A five-party coalition government that includes the Christian Democratic, Socialist, Democratic Socialist, Liberal and Republican parties, Italy's new government is headed by the former Foreign Minister Giulio Andreotti, a Christian Democrat (CD). The Deputy Prime Minister, Claudio Martelli, and the Foreign Minister, Gianni de Michelis, are Socialists, while the new Defense Minister, Nino Martinazzoli, is a Christian Democrat. Martinazzoli is widely considered to be more "left-of-center" than his Liberal party predecessor, Valerio Zanone, and has been mentioned as the eventual leader of the CD's left-wing faction. In fact, several Italian analysts to whom IFPA has spoken agree that members of the new government coalition, including the

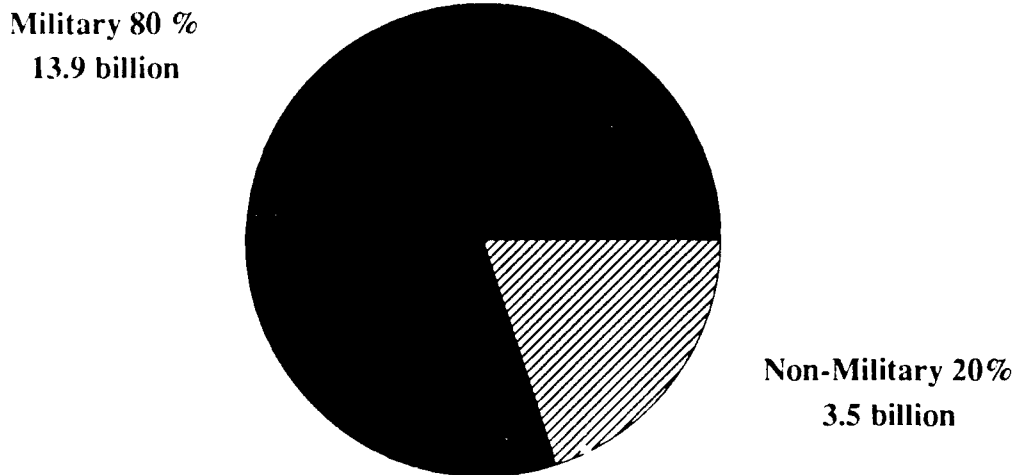


Figure 11. 1990 Italian defense budget (in % and billions of \$US).

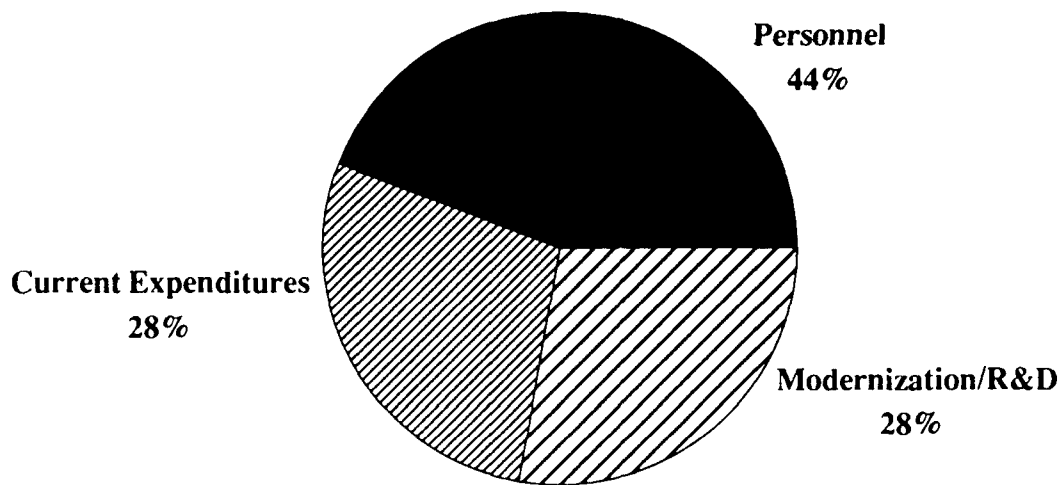


Figure 12. 1990 Italian defense budget.

pragmatic Prime Minister, bespeak a general political shift to the “left,” which could result in a subtle reorientation of Italian foreign and defense policies.

Much of the new government’s agenda is being shaped by the country’s fiscal crisis (this year Italy’s budget deficit will be 11% of its Gross Domestic Product), and by the overwhelming desire of Italians to move into the next century as responsible members of a European Community having broader political responsibility. To get the country ready for 1992, and the implementation of a single European market, the new Italian government is expected to put into place fiscal reforms and budget policies that will provide for no growth, or even negative growth (allowing for inflation) in the defense sector. In an interview early in September, Prime Minister Andreotti indicated that he intends to halt the steady accumulation of the Italian government’s debt, and that one road to this end would be to cut-back and/or stretch-out defense program funding. In this context it is unlikely that *Project 2000*, Italy’s ten year military modernization plan — which would envision priority to Rapid Deployment Force procurements and defense of Italian airspace based on interceptor and surface-to-air missile (SAM) assets — can be implemented. Even though it is based on only a two percent annual budget increase over a ten year period, neither a budgetary strategy calling for 30,000 billion Lire (\$20.5 billion) over a decade, nor a more modest one involving 13,000 billion Lire (\$8.9 billion), has yet been

submitted to Parliament. The 1989 Italian defense budget was for 23,000 billion Lire (\$16.5 billion), and a rise to 25,000 billion Lire (\$19.08 billion) was programmed for 1990. Late in November 1989, Italy's 1990 defense budget received Parliamentary approval. The 1990 budget provides for a total expenditure of 18,837 billion Lire (\$13.9 billion), which is, in comparison to the 1989 military budget, a 3.3% decrease (in real terms). A further cutback of 1000 billion Lire (\$763.4 million) against the 1990 budget figure of 25,000 billion Lire (\$19.08 billion) is now expected to be voted in Parliament in early 1990. Of the funds allocated to defense, and as reflected in the accompanying figure, 28.2% is to go to equipment modernization and weapons research and development programs. Among the major weapons programs that are funded are: the AMX close air support plane (\$ 51 million); the *Centauro* main battle tank (\$20 million); the *Tornado* aircraft (\$20 million); the procurement of Army utility helicopters

Table 13. Major Italian equipment procurements in 1990 defense budget.

	Lire	Dollars
AMX	66,000 million	51 million
Centauro Tank	26,000 million	20 million
Tornado A/C	26,000 million	20 million
Army Utility Helos	20,700 million	15.9 million
SIDAM Air Defense	19,200 million	14.8 million

(\$ 15.9 million); and the *SIDAM* mobile air defense system (\$14.8 million).

For Andreotti, a negative growth defense budget poses little problem politically, since the Italians as a whole view the traditional threats from the East — which was the driving rational for defense spending — as substantially reduced over the last two years. So, too, the defense investment constituency in Italy is virtually limited to members of the military establishment itself and to defense-related industry. While Italians do acknowledge a “southern threat” (e.g., from Libya), they perceive very little likelihood of Soviet attack in the current dynamic European security environment. Indeed, among Italian strategic analysts, there is a widening consensus that the events of November 1989 in Eastern Europe have profound implications for European security structures raising the need for a substantial revision of national defense planning and a reassessment of NATO's role.

6.2 EMERGING SECURITY CONCERNS.

Italian defense analysts, by and large, continue to see a need for the Atlantic Alliance in the changing European security environment, but they also expect — as do most of the European

allies — that NATO will evolve to adopt more a political-managerial role from its current focus on military-defense considerations. They see, for example, an important Alliance role in facilitating and monitoring arms control agreements and verification regimes in Europe. They also see NATO as the institutional mechanism for developing a fuller relationship between the United States and the European Community after 1992. This view, however, is not unanimously held, for there are some Italians who support the dissolution of NATO and the Warsaw Pact altogether. In place of the old Alliances, these Italians endorse an expanded EC framework (to embody defense responsibilities), or, alternatively, a strengthened WEU. Still, a majority of Italian defense analysts, while supportive of strengthening European institutional frameworks for political and security cooperation, nevertheless remain convinced of the need for a sustained U.S. troop presence on the Continent.

In this context, Italian policy officials and defense analysts have expressed concern over reports in the U.S. press about American plans to cut significantly into its forward-based force structure. On one level, the discussion of proposed American troop cuts is viewed as lending a rationale for Italian defense budget cuts, but at another, more fundamental level, a significant draw-down of American troops in Europe could, it is feared, heighten the prospects for instability on the Continent at this fragile point in Europe's strategic evolution. Thus, it was with mixed emotions that Italian political and defense analysts greeted Gorbachev's calls for naval disarmament in Europe. On the occasion of his state visit to Rome (prior to the U.S.-Soviet Summit Meeting in Malta), the Soviet leader renewed his calls for naval arms control talks, a theme that finds sympathy among a growing number of the Italian populace who do not like hosting U.S. Sixth Fleet assets on Italian territory and in national waters. Thus far, Italian defense officials have been adamant about not giving in to public pressure on this issue. They remain unwilling to support the inclusion of naval forces in the CFE, moreover, primarily because of the potential implications this could have for the local balance of power in the Mediterranean region. Italian officials also oppose the inclusion of naval forces in a CSBM regime, which the Italians feel are outside of the Madrid mandate governing the talks. Italy's geostrategic situation together with Italian interests in the Mediterranean region (where nine of the eighteen countries are not part of the CSCE process) and Italian out-of-area interests beyond NATO boundaries, forms the basis of Italy's reluctance to endorse naval arms limitations in either of these two fora.

Yet, Italian concerns over the CSCE process are not limited to the CSBM negotiations, but extend also to the parallel CFE process. Of immediate concern to Italian defense analysts is the conceptual framework adopted at the talks, which is perceived as separating Italy from NATO's Central Region. Together with Hungary, France, the United Kingdom, and the Kiev Military District Italy is envisioned to be part of an "intermediate zone," which some Italian defense

officials perceive as an exclusion from NATO's most important preoccupation (i.e., the Central Front). Moreover, for Italian defense analysts, the notion inherent in the NATO CFE proposal of "concentric zones" threatens to lead to the formation of arms control borders in Europe, and in the worst case, could have the strategic effect of isolating Italy from the rest of its European-NATO Allies. Already in Rome the trend toward development of regional (Balkan) cooperation (to include Hungary, Austria, Yugoslavia, and perhaps even Albania) is being pushed — albeit in non-military areas like pollution control — as a framework for Italian collaboration in Europe. According to military analysts, the growing perception among Italian officials that Italy is "outside the development process taking place in NATO" could have profound consequences for Italian defense planning. At the very least, it could "leave Italy without an enemy," taking away the major rationalization for the reform and modernization of the Italian military. At worst, the process could drive the Italians toward some form of armed neutrality, although this latter contingency is unlikely over the near-term. More likely would be a situation in which Italian interests are defined less implicitly in line with those of the NATO Allies, and more explicitly in the context of southern regional requirements and power balance calculations.

The perceived southern threat — which often is explained in terms of a combined air and naval missile threat from Libyan forces against Italian shipping and territory — may be heightened in the near future if and when the Libyans acquire long-range ballistic missiles and a variety of new warhead technologies, possibly including chemical capabilities. Italian defense planners see defense against such capabilities as forming the priority consideration in current and future budget planning. Even so, because of the glaring budget deficit, funding allocation for Italian purchase of a potential missile defense capability in the form of the *Patriot* air defense missile — the purchase of which will, in any event, require enactment of special legislation by Parliament — is not likely to be forthcoming. In August 1989, Italy's Supreme Defense Council emphasized the importance of maintaining and modernizing Italian military forces, based upon *Project 2000*, but funding for major weapons initiatives is highly improbable, unless the programs are part of a multinational collaborative effort (which carries broader political implications, such as the European Fighter Aircraft — EFA — and the *Eurosam* programs) or if they can be justified as priority items for national industry (as in the development of a surveillance and a military C³ satellite). Yet, in the current fiscal crisis environment, collaborative programs are also likely to be sacrificed. Already, Italian support for the NATO Modular Stand-off Weapon (MSOW) has eroded, and Italian defense officials have opted to pull out of the Alliance's anti-aircraft frigate program. The future viability of Italian participation in EFA is also uncertain, as is continued budget support for the French-Italian *Eurosam* program.

The reorientation of Italy's strategic focus from forward defense of its northeastern borders to a stronger Mediterranean presence and a southern threat emphasis is accompanied by a new priority for the rapid deployment of aero-naval forces and air defense assets. *Project 2000* legitimizes these defense priorities, but offers little in the way of constructive ideas of how to meet the military's funding requirements. Some logistical cuts (in basing infrastructure) are probable, and older barracks are projected to be closed. A cap will also be placed on general officer numbers, and further personnel cuts appear to be in the "offing". Beyond these initial steps, additional cost-saving measures are likely to be announced early in 1990. In addition, it is likely as well that Italian legislation governing weapons exports will be changed to facilitate arms sales, in the hope of finding new defense markets to help offset costly European-oriented weapons programs. In November 1989, for example, the Cabinet Council, which is chaired by the Prime Minister, decided to allow Italian arms exports to Iran and Iraq, and some restrictions on the sale of dual-use technologies (having both military and commercial applications) were lifted. Specifically these relate to dropping the requirement for an "end user certificate," which identified the ultimate buyer or user of the weapons or technologies purchased. These changes in Italian export law are likely to be greeted warily, if not with outright hostility, by COCOM, which is already "up in arms" over the alleged sale by Olivetti of computerized machine-tool technologies to the Soviet Union (which supposedly were incorporated by Soviet technicians into the Yak-41 vertical take-off fighter aircraft).

Table 14. Major elements of allied force restructuring plans: Italy.

Factors Influencing Changes	Force Structure Implications	Planning Guidance	Procurement Priorities
<ul style="list-style-type: none"> • Greatly reduced Soviet (Northeast) threat perception; Mediterranean and "out-of-area" (i.e., Southern/Libyan) threat emphasized • Severe demographic problems (in 18-25 year old cohort group) and little popular support for military service • National budget deficit and negative growth defense spending • Arms control process viewed as a rationale for national force structure cuts • New attention being given to European and regional (Balkan) cooperation, including in the defense area 	<ul style="list-style-type: none"> • CFE process will result in significant cuts in national inventories • SNF negotiations hoped to make unnecessary transfer of U.S. F-16s • European defense collaboration will increase • Weapons exports and arms sales will provide one means of lowering unit costs and stretching-out production runs of expensive new technology systems • New concept weapons, based on, for example, KEW and laser technologies, will influence future force structures • Greater mobility and mobilization base infrastructures will become more important • "Out-of-Area" contingencies may force Italian intervention 	<ul style="list-style-type: none"> • Project 2000 <ul style="list-style-type: none"> » Greater emphasis on mobility and "moveable" (lighter) force components » Power projection assets emphasized » Point and limited area air defenses are becoming more important » Army missions likely to change after CFE 	<ul style="list-style-type: none"> • Army <ul style="list-style-type: none"> » New "lighter" tank technologies » MLRS and new generation artillery rounds • Air Force <ul style="list-style-type: none"> » EFA » SAM/MSAM/SHORADS • Navy <ul style="list-style-type: none"> » Carrier-based air assets » Naval air defenses » Carrier battle-group escorts

SECTION 7 BELGIUM

7.1 ONGOING BUDGET CUTS.

Not surprisingly, the continuing slide in Belgian defense expenditures — and its likely impact on key weapons modernization programs — dominated defense policy discussions in Belgium during the latter half of 1989. Faced with a gross national debt in the neighborhood of 752 billion Belgian Francs (or about \$19.3 billion), the current center-left Martens Government — commonly known as Martens VIII — agreed in late July to slash the defense budget proposed for Fiscal Year 1990 by some 1.7 billion Francs (or about \$43.6 million), reducing total defense expenditures slated for FY90 from an earlier target of 104 billion Belgian Francs (or about \$2.67 billion) to approximately 102.3 billion (or about \$2.62 billion). Clearly, these cuts, which come on the heels of a whole range of defense austerity measures approved by the Government in March 1989 (and valued at some 2 billion Belgian Francs, or about \$51.3 million), will do little to reverse the steady erosion of recent years in Belgium's military capabilities. Already, Belgium ranks twelfth among the Allies — behind Turkey and Portugal — in meeting overall force goals established by NATO, and as the Chief of the Belgian General Staff, General Jose Charlier, admitted in a special study of Belgium's defense needs (dubbed the Charlier Report) released to the public in February 1989 Belgium's standing will almost certainly worsen if future defense budgets were to drop below the preferred baseline of 104 billion Belgian Francs (again, about \$2.67 billion). The consequences, it was said, would be particularly dire for the procurement and/or modernization of essential military equipment, a budget item on which Belgium now spends less — that is, only 11.9 percent of annual defense expenditures — than any other Ally except Luxembourg.

Looking to the future, moreover, the prospects for halting this downward spiral in defense spending are virtually nil. In the first place, the spending level officially agreed to by the Government and subsequently endorsed by Parliament was actually only 99 billion Belgian Francs (or about \$2.54 billion), with the additional 3.7 billion Belgian Francs (or about \$94.9 million) being cobbled together from unspent funds in scattered MOD bank accounts. Hence, when the issue of FY91 spending levels is addressed, Cabinet ministers and Parliamentarians — especially those affiliated with the broadly anti-defense Flemish Socialists — are likely to view the FY90 level of 99 billion Francs (\$2.54 billion) as an upper limit, while pressing for a still lower figure. Indeed, among Belgium's shaky coalition cabinets, defense spending — and the military in general — has never enjoyed particularly broad support, and given the center-left cast of the current coalition (composed of the Christian parties, the Socialist parties and a Flemish

nationalist party) the traditional predilection to hold down — and, wherever possible, reduce — military expenditures will be stronger than ever. This will be especially true now, in view of the sweeping political changes taking hold in Eastern Europe (all of which have reduced the perceived threat from the Warsaw Pact), and given the rather pervasive expectation in Belgium (as in other Allied countries) that the CFE negotiations in Vienna will soon yield substantial dividends in the form of reduced defense expenditures.

In the second place, if current opinion polls are correct, opposition to military service and a more vigorous Belgian defense effort — views that generally have been felt most acutely within the Flemish-speaking community — seems to be gaining converts throughout Belgian society more generally, especially among younger age groups (that is, 34 years old and under). In a broad-gauged survey of Belgian attitudes toward the military prepared for the Minister of Defense (and published in *Le Soir*, a major French-language daily), it was revealed that only 32.6% of the entire population had a positive image of military service as currently practiced in Belgium, while 46.3% had a distinctly negative impression. More striking still, 67.7% of those interviewed agreed with the proposition that military service should be designed primarily as a period of “enrichment” for young people, rather than as a time for training new soldiers to defend the Belgian homeland. Among Belgian conscripts now on duty, more than 80% viewed military

Table 15. Main austerity measures in the Charlie report.

- Over the next five years, the return to Belgium of 1400 troops stationed in the FRG, including an anti-aircraft artillery battery, an engineer company, a field artillery observation unit, and three *Alouette II* helicopter squadrons.
- A restructuring of active and reserve units, providing for a greater sharing of the same up-to-date equipment.
- An earlier phase-out of the aging JPK 90mm guns and first generation *Swingfire* anti-tank weapons.
- A gradual reduction from 144 to 120 in the number of Belgian combat aircraft made available to NATO, together with a regrouping of air wings into 8 squadrons stationed on 4 air bases.
- More limited use of the Anvers-Kallo naval base and reductions in the amount of equipment permanently assigned to the minesweeper fleet.
- Deferral of plans for frigate modernization and for participation in advanced combat aircraft programs.
- Deactivation of an Army Headquarters unit, coupled with a reduction in Army training centers.
- Reassessment of the military attache program.
- Sale of underutilized military buildings in the Brussels region.

service as a waste of time and money, providing far too few opportunities to learn skills (e.g., computer training, foreign languages) that might be useful later in finding employment in the civilian sector. Forty-eight percent of the conscripts saw the Army as Belgium's premier service, and the one most dependent on draftees — as “essential” or “hardly necessary”, while 29% viewed the Army as a “necessary evil” and only 16% considered it “absolutely useful”. As for the Belgian public at large, a full 76.5%, according to the poll, believed that there was no prospect of any real military threat to Belgian national territory in the coming decades. With attitudes such as these gaining prominence, calls for more concerted efforts to hold the line against further reductions in the defense budget are likely to fall on deaf ears.

It is true, of course, that a number of cost-cutting measures set forth in the Charlier Report — and subsequently endorsed by the Martens Government — could help to soften the blow of current budget constraints, at least over the short-term. Charlier's recommendations — key aspects of which are outlined below — aimed primarily at slicing operational expenses by

Table 16. Army restructuring under the Charlier plan.

Measure	Start	End
1. Return to Belgium		
14th Artillery Battalion	1991	1991
80th Artillery Battery & Drones Platoon	1990	1990
Light Aviation Units	1992	1993
68th Engineer Company	1991	1991
2. Restructuring		
Homogenization of Active and Reserve Brigades	1990	1995
De-activation of Division Headquarters	1990	1990
Reorganization of HAWK Units	1991	1993
Reorganization of SHORAD Units	1992	1994
3. Outphasing		
JPK	1990	1990
SWINGFIRE	1990	1990
MOFAB (Bridging Equipment)	1990	1990
BRITTAN NORMAN	1991	1993
ALOUETTE II	1990	1993

phasing-out older equipment earlier than planned, by restructuring both active and reserve units (to include selective deactivations), and by recalling to Belgium several units now stationed in the FRG. Taken together, these initiatives, the Chief-of-Staff argued, could yield a total savings in defense spending equivalent to 2 billion Belgian Francs (or some \$51.3 million), an economy that the Government — as noted already — was quick to approve. Charlier's austerity plan, however, was presented originally as only part of a larger funding package that was meant to revitalize the Belgian military by coupling cuts in operational expenses with a more generously funded procurement program and a commitment by Belgium to hold the defense budget at 104 billion Belgian Francs (\$2.67 billion). The decision in July to slash military spending by another 1.7 billion Francs (or about \$43.6 million), therefore, simply confirmed the worse fears of Charlier and his colleagues at the General Staff — namely, that Belgium's political leadership would be all too eager to embrace the cost-cutting features of the Charlier Plan, without committing to the rest of the program. As a result, the outlook for defense spending in Belgium is likely to follow the current path of steady decline for some years to come.

7.2 REVISED PROCUREMENT PROGRAMS AND PRIORITIES.

Given the extremely low levels of Belgian investment in new military hardware during the 1980s, General Staff and MOD officials remain most concerned over the likely impact of additional budget cuts on procurement funds, and, while final decisions have yet to be made, it seems quite clear that the spending reductions agreed to in July — and the prospect of more to follow — have indeed forced a re-evaluation of Belgium's procurement priorities. To date, the most immediate effect has been a 2 billion Franc (or about a \$51 million) reduction in the FY89 procurement budget, dropping it from some 35 billion Francs (about \$897.4 million) to around 33 billion Francs (\$846.2 million). For FY90, a further reduction in equipment funds equal to about 3 billion Francs (or \$76.9 million) is expected, which would allow for a procurement budget in the neighborhood of 22 billion Francs (or some \$564.1 million) as opposed to the previous target of 25 billion Francs (or about \$641 million). To be sure, these funding cuts are not yet so deep as to throw into question the basic integrity of the mid-term (1989-1992) procurement program proposed by General Charlier and accepted by the Martens Government in March 1989. What they are likely to prompt, however, is a substantial stretching out of programmed funds beyond the initial four-year time-frame, with total expenditures through FY92 falling considerably below the target level of 104.8 billion Belgian Francs (or about \$2.69 billion).

With the decision on electronic countermeasures (ECMs) for the Belgian F-16s already taken in May 1989 (in favor of the French *Carapace* system), MOD and General Staff analysts have identified four critical modernization programs for which they hope to receive major funding

— that is, some 18.4 billion Belgian Francs (or \$471.8 million) — over the next several years. Specifically, these include:

- An upgrading of the Army's 334 *Leopard I* tanks with new infrared fire control systems and night/all weather vision devices at a projected cost of 12.3 billion Francs (or about \$315.4 million) over the 1990-99 time-frame. The Belgian firm SABCA expects to serve as prime contractor for the project, which should result in the modernization of up to 50 tanks per year.
- The conversion by 1993 of 20 *Mirage-VB* fighter-bombers to an advanced reconnaissance/strike role, fitting them with the *Uliss 91* navigation/attack system produced by the French firm SAGEM. Once again, SABCA will serve as the prime contractor for this upgrade, with overall program costs set at 3.5 billion Francs (\$89.7 million) for the new equipment and 1.2 billion (\$30.8 million) for improvements to the aircraft to keep them in service until the year 2000. The remaining 36 *Mirages* held by the Belgian Air Force will be retired at the end of their service life.
- Participation in the joint European TRIGAT third-generation anti-tank weapons program to the tune of 1.17 billion Francs (or about \$30 million). First deliveries of this medium-range missile system are expected in 1995, although Belgium's involvement in the current R&D work does not commit it to participation in the production phase of the project.
- Collaboration with the Netherlands in the design of a new coastal minesweeper at a cost of 225 million Francs (or about \$5.8 million). The first prototype is scheduled to be ready by 1992, and both Belgium and the Netherlands currently plan to buy 10 vessels.

Initial approval for these four projects was granted at the end of July by the Ministerial Committee for Social and Economic Coordination, which sets priorities for defense industrial production and assures a fair distribution of any Belgian-based work among the three federal regions — Brussels, Flanders and Wallonia. Barring any unforeseen fiscal crisis, start-up funds will be released in FY90.

Among the projects that went under-funded as a result of July's budget cuts were the Belgian Navy's plans to modernize four frigates and to develop a new antisubmarine warfare (ASW) missile. For the time being, the frigate upgrade will be confined to the acquisition of modern sonar and a limited number of light torpedoes, and Belgium may contribute token funding to a joint NATO study aimed at the design of a low-cost ASW weapon to complement the more expensive torpedo systems now in use. The current round of reductions in equipment funds also have dashed Army hopes for a *Leopard II* tank buy, and have closed the door — once and

for all, it would appear — to any Belgian participation in the new generation fighter projects now being championed for the European market, including the European Fighter Aircraft (EFA), the *Rafale* and the *Agile Falcon* F-16 derivative. Plans to fund the F-16 mid-life upgrade — commonly known as Arrangement #44 — went untouched, however, perhaps because no real expenditures are required until after 1992.

7.3 SNF MODERNIZATION.

Since the NATO Summit in May 1989, debate over short-range nuclear force (SNF) policy in Belgium — as in most other NATO countries — has been placed on the “political backburner”. For the time being, those who led the fight against SNF modernization — most notably the Flemish Socialists — are willing to accept the Summit compromise, which postponed any decision on a follow-on to *Lance* (FOTL) until 1992, and promised to update SNF only “where necessary”, while supporting SNF negotiations once implementation of a CFE agreement is “underway”. To be sure, Belgian opponents of SNF modernization still would prefer immediate SNF negotiations without any linkage to the state of progress at the CFE talks, and they remain adamant in their opposition to the deployment of new, extended-range SNF systems (including FOTL or TASM — the tactical air-to-surface missile — as currently conceived). Most would also agree with post-Summit statements made by West German politicians suggesting that a “third zero” option was still a real possibility, even if priority had to be given in the first phase of negotiations to a “partial reduction” (as stated in the Summit Communiqué) of SNF forces. Yet, key activists among the anti-SNF Flemish Socialists — including Rik Coolsaet, the influential Deputy Chief of Cabinet at the MOD, who first prodded Defense Minister Coëme to speak out against early SNF modernization at the Fall 1988 Nuclear Planning Group (NPG) meeting — now seem convinced that the CFE process will so alter the threat environment in Europe, that both the will and the rationale for modernizing SNF will be lost. In a post-CFE I environment, Coolsaet recently acknowledged, NATO may well be forced to retain a reduced SNF inventory (with a “freeze” on SNF range capabilities); but once a CFE II agreement has been reached, it should be possible, he went to say, to remove all U.S. and Soviet SNF forces from the European theater. French SNF assets, he implied, might usefully be kept outside of a CFE II agreement as an “ultimate guarantee” (by a Continental power) of West European security, but that would be a matter for future negotiation among the NATO European countries (in consultation, of course, with the United States).

A less strident, “wait and see” attitude also prevails among more centrist elements in the Martens Government, including Defense Minister Coëme, who — like many Walloon Socialists — has never been vehemently opposed to all SNF modernization, so long as it proceeded at a slow, cautious pace (attuned to evolving changes in the Warsaw Pact threat). Indeed, Coëme has

argued, perhaps a bit self-servingly, that his main objective in refusing to endorse NATO proposals for SNF upgrades (offered at the NPG meeting in October 1988 — an act which opened the door to a wider Alliance debate on SNF policy) was to halt what had become, in his opinion and that of his key advisors, the rather routine, “rubber stamp” process of nuclear modernization in NATO. As a newly-appointed Defense Minister in a still untested center-left coalition, Coëme (at the time) also felt compelled to remain more sensitive than he might otherwise be to the anti-SNF sentiments of the Socialist left-wing, especially the powerful Flemish bloc. For these reasons alone, the Summit SNF formula — which deferred the FOTL issue, while holding out the promise of SNF arms control after CFE I — was an appealing compromise for Coëme, as it was for Prime Minister Martens and most of the Christian bloc. Coëme, after all, has no need to be more critical of NATO SNF policy than the Flemish Socialists, and so long as *they* remain satisfied with the Summit agreement, he is likely to take more of a “back seat” position in future NPG debates. As with their counterparts in all other NATO countries, Belgian MOD officials, together with nuclear policy planners at the General Staff, have now turned their attention to an assessment of the appropriate role, size and composition of NATO’s SNF inventory in a post-CFE environment. So far, few firm conclusions have been reached, apart from the widely-held belief (evident across the Belgian political spectrum) that theater deterrence can and should be maintained with far fewer SNF systems.

Following on from this last point, there is emerging in Belgium — as there is in NATO Europe generally — a relatively broad consensus in favor of a “minimal deterrence” posture (at least with respect to SNF), whereby the real deterrent value of nuclear forces is seen to lay not so much in their warfighting capabilities (which many Belgians view as destabilizing) as in their political role as a potential “last warning” against further aggression. Viewed from this perspective, the size of the NATO nuclear inventory, MOD and General Staff analysts suggest, could be reduced dramatically without ill effect, perhaps to as few as one or two dozen warheads. Defense analysts in Belgium remain deeply divided, however, over precisely which SNF systems would be most compatible with a credible minimal deterrence posture. For most professional soldiers (including those responsible for nuclear planning at the General Staff level), NATO could safely do away with most (if not all) the nuclear artillery, while phasing in a limited number of longer-range, more survivable and more responsive systems, such as TASM and — if the FRG ever agrees (which few think it will) — FOTL. But powerful elements within the Martens Government — led by the Flemish Socialists — remain bitterly opposed to both TASM and FOTL, precisely because such systems — with their longer ranges and quick response times — are, in fact, “more useable”. Such weapons, so the argument goes, are relics of the warfighting concepts associated with Flexible Response, and not necessary for what has

become (in their view) the more important deterrence mission of SNF forces — namely, providing “pre-strategic” warning to a potential aggressor. For many opponents of SNF modernization, moreover, TASM and FOTL deployment — especially systems with 400-plus kilometer ranges — would reverse what they perceive to be a generally positive trend toward reduced ranges in theater nuclear systems brought about by the INF Treaty. Should SNF policy once again become the focus of Alliance debate (and it most likely will), such views as these may very well carry the day in Belgium, as they did in the past.

7.4 CFE ISSUES.

As for the specifics of current CFE negotiations, Belgian officials — while generally enthusiastic over the Bush proposals adopted at the NATO Summit — share many of the same reservations expressed by other NATO Europeans regarding verification schemes. In short, they have been less than enthusiastic over U.S. verification plans that call for highly intrusive monitoring regimes in the Atlantic to the Urals (ATTU) region only, leaving American territory and Soviet territory beyond the Urals subject to far less stringent observation. As with a number of smaller countries, Belgium, moreover, has been adamant that the scale and number of country inspections allowed under a CFE agreement be proportional to the level of each country’s military forces. Belgium, they argue, should not be subject to the same degree of inspection that the Soviet Union — or, for that matter, the FRG — might be forced to accept. Belgian General Staff and MOD planners also have emphasized the need for NATO to apportion any force reductions negotiated in Vienna in a way that is sensitive to the current procurement programs and force structure needs of the smaller Allies. For example, having just invested a sizeable proportion of scarce equipment funds in the purchase of a new helicopter fleet, Belgium would hope that it could take a proportionately smaller cut in this weapons category, while perhaps making up the difference elsewhere (say in troop carriers, where current systems are in need of modernization). Conversely, Belgian officials have expressed an interest as well in gaining access to the equipment relinquished by other Allied nations (presumably at reduced cost), in order to redress longstanding shortfalls in Belgian military hardware (e.g., upgraded APCs).

7.4 THE FUTURE EUROPEAN SECURITY SYSTEM.

Having assumed the presidency of the Western European Union (WEU) in July 1989, Belgian officials — most particularly Defense Minister Coëme and the new Foreign Minister, Mark Eyskens — have become increasingly vocal in discussions aimed at defining a future European security system that is more compatible with current evolutions in East-West and TransAtlantic relations. During the last half of 1989, for example, Coëme and Eyskens took the initiative in promoting the idea of a European-based crisis reduction center, which could provide a useful

institutional mechanism for East-West dialogue and cooperation in times of instability. So, too, they have encouraged the WEU to launch a new study on post-CFE Europe, paying special attention to the likely interconnections among NATO, the WEU and the European Community (EC). Indeed, with some notable exceptions (Coolsaet, for one), Belgian MOD and Foreign Ministry officials have been strong supporters of a more active role for the EC in European security affairs, especially (though not exclusively) in the realm of arms collaboration and defense industrial policy. Partly for this reason, no doubt, a Belgian General Staff officer working at the armaments directorate (a Col. Georges Denarghin) has been placed in charge of a new policy panel attached to the Independent European Program Group (IEPG), for the sole purpose of exploring the implications of the single European market — or EC 92, for short — on the production and trade of defense-related technologies.

Yet, even with a broader defense role for the EC, most Belgian analysts continue to see NATO as the premier security organization for the foreseeable future, especially as NATO's arms control role expands. The NATO staff and infrastructure, it is argued, have played — and will continue to play — an instrumental role in the shaping of Western arms control positions, and — once a CFE agreement is reached — could clearly help to coordinate Allied force reductions, as well as the verification process. However, there is growing support in Belgian political circles — especially among the Socialists — for a NATO with a much more explicitly European cast. And to survive and prosper through the 1990s and beyond, this new, more European NATO, so the argument goes, must have the more active participation of the French and a European SACEUR. Ideally, a "Europeanized" NATO would require only a token U.S. troop presence, but it would be unwise to move in that direction, Belgian advocates of these changes still would agree, until Soviet troops are largely withdrawn from Eastern Europe and reconfigured into a more defensive-oriented deployment pattern.

In addition to a strengthened EC and a reorganized NATO, a "third leg" to the new European security structure, Belgian officials recently have suggested, might be found in the institutionalization of the Conference on Security and Cooperation in Europe (CSCE) process. Especially important in this regard, it is said, are the current negotiations in Vienna on Confidence and Security Building Measures (CSBMs), which ultimately should set in place a series of operational constraints on NATO and Warsaw Pact military forces. Together with force reductions agreed upon at the parallel CFE talks, CSBM measures, it is stressed, could render the prospect of sudden, unexpected offensive strikes across the East-West border next to impossible.

Table 17. Major elements of allied force restructuring plans: Belgium.

Factors Influencing Changes	Force Structure Implications	Planning Guidance	Procurement Priorities
<ul style="list-style-type: none"> • Concern over mounting Belgian budget deficit, leading to continued decline in defense spending • Public perception of decline in security threat confronting Belgium • Ongoing constraints on available military manpower • Government role for anti-nuclear Flemish Socialist Party • Strong traditional anti-military attitudes, increased public questioning of continuing need for large military expenditures • Emerging consensus in favor of "minimal deterrence" posture for NATO nuclear forces 	<ul style="list-style-type: none"> • Focus on Belgian I Corps capabilities, even at expense of Navy/Air Force procurements • Improve effectiveness of reserve component by making available first-line equipment • Oppose SNF modernization via extended range systems; pressure for immediate negotiations • Emphasize potential for European defense collaboration • Decision against <i>Patriot</i> procurement for Central Front air defense belt 	<ul style="list-style-type: none"> • <i>Charlier Report</i> <ul style="list-style-type: none"> » Return to Belgium of 1400 troops stationed in FRG » Restructuring of active and reserve units, providing for greater commonality in equipment » Phase out of JPK 90mm guns and first generation <i>Swingfire</i> anti-tank weapons » Reduction of Belgian combat aircraft made available to NATO (from 144 to 120) » Limitations on use of Anvers-Kallo naval base, reductions in equipment permanently assigned to minesweeper fleet » Deferral of plans for frigate modernization and participation in advanced combat aircraft programs » Deactivation of an Army HQ unit, reduction in Army training centers 	<ul style="list-style-type: none"> • Army <ul style="list-style-type: none"> » Consolidation of new combat helicopter fleets (Agusta 109s) » Upgrade <i>Leopard I</i> tanks with new fire control/night vision capabilities (<i>Leopard II</i> purchase plans abandoned) • Air Force <ul style="list-style-type: none"> » Deployment of advanced ECM (French <i>Carapace</i> system) on F-16s » Conversion of only 20 <i>Mirage VB</i> fighter-bombers to advanced recce/strike role » Mid-life upgrade of Belgium's F-16 fleet (participation in advanced combat aircraft program not to be undertaken) • Navy <ul style="list-style-type: none"> » Development of new coastal minesweeper (with Netherlands) » Only limited upgrade of frigates » Renewed interest in low-cost ASW missile

DISTRIBUTION LIST

DNA-TR-90-1

NATO

HEADQUARTERS NORTHAG
ATTN: G2 PLANS BRANCH

DEPARTMENT OF DEFENSE

ASSISTANT TO THE SECRETARY OF DEFENSE
ATTN: EXECUTIVE ASSISTANT

DEFENSE ADVANCED RSCH PROJ AGENCY
ATTN: TTO

DEFENSE COMMUNICATIONS AGENCY
ATTN: J DIETZ

DEFENSE INTELLIGENCE AGENCY
ATTN: DB
ATTN: DB-TPO
ATTN: DI-5
ATTN: DIO-GPF F SHAW
ATTN: DIO, D SPOHN
ATTN: DOCUMENT CONTROL
ATTN: DT/J VORONA
ATTN: LIBRARY
ATTN: RTS-2B

DEFENSE NUCLEAR AGENCY
ATTN: DFRA
ATTN: NANF
ATTN: NASF
ATTN: OPNA
ATTN: OPNS
ATTN: RAAE
ATTN: RAEE
ATTN: RAEV
ATTN: RARP
ATTN: SPSD
ATTN: SPWE
ATTN: TDR
4 CYS ATTN: TITL

DEFENSE NUCLEAR AGENCY
ATTN: TDNM
2 CYS ATTN: TDTT W SUMMA

DEFENSE TECHNICAL INFORMATION CENTER
2 CYS ATTN: DTIC/FDAB

DEPUTY UNDER SEC OF DEF POLICY
ATTN: R STIVERS

DNA PACOM LIAISON OFFICE
ATTN: DNALO

FIELD COMMAND DEFENSE NUCLEAR AGENCY
ATTN: FCPR

INTELLIGENCE CENTER, PACIFIC
ATTN: DOCUMENT CONTROL

JOINT DATA SYSTEM SUPPORT CTR
ATTN: JNSV

NATIONAL DEFENSE UNIVERSITY
ATTN: DOCUMENT CONTROL
ATTN: NWCO

NATIONAL INTELLIGENCE SYSTEMS
ATTN: DOCUMENT CONTROL

NATIONAL SECURITY AGENCY
ATTN: DOCUMENT CONTROL

NET ASSESSMENT
ATTN: DOCUMENT CONTROL

PROGRAM ANALYSIS & EVALUATION
ATTN: STRATEGIC PROG & TNF

STRAT AND THEATER NUCLEAR FORCES
ATTN: DR SCHNEITER

THE JOINT STAFF
ATTN: JP

THE JOINT STAFF
ATTN: J-3/NUC OP BR, STRAT OPS BR
ATTN: J-8/PMAD
ATTN: JAD/SFD

U S CENTRAL COMMAND
ATTN: CCJ3-X

U S EUROPEAN COMMAND/ECJ3-CCD
ATTN: ECJ-3

U S PACIFIC COMMAND
ATTN: J32, CAPT H M ANDERSON

UNDER SEC OF DEFENSE FOR POLICY
ATTN: DIR STRAT POLICY F MILLER
ATTN: DUSP/P

UNDER SECRETARY OF DEFENSE
ATTN: K HINMAN
ATTN: STRAT & ARMS CONTROL L MENICHIELLO

DEPARTMENT OF THE ARMY

DEP CH OF STAFF FOR OPS & PLANS
ATTN: DAMO-FDE
ATTN: DAMO-FDQ
ATTN: DAMO-SSM(POL-MIL DIV)
5 CYS ATTN: DAMO-SWN
ATTN: TECHNICAL ADVISOR

DEPARTMENT OF THE ARMY
ATTN: DAMI-FIT-ST (MAJ GREENE)

HARRY DIAMOND LABORATORIES
ATTN: SLCHD-DE
ATTN: SLCHD-NW-P

PENTAGON LIBRARY
ATTN: DOCUMENT CONTROL

DNA-TR-90-1 (DL CONTINUED)

U S ARMY BALLISTIC RESEARCH LAB
ATTN: SLCBR-SS-T (TECH LIB)
ATTN: SLCBR-VL

U S ARMY COMD & GENERAL STAFF COLLEGE
ATTN: CTAC

U S ARMY FOREIGN SCIENCE & TECH CTR
ATTN: AIFRTA
ATTN: DOCUMENT CONTROL

U S ARMY INFANTRY CENTER
ATTN: ATSH-CD-CS

U S ARMY INTELLIGENCE & SEC CMD
ATTN: DOCUMENT CONTROL

U S ARMY ITAC
ATTN: AIAIT-HI

U S ARMY LOGISTICS CENTER
ATTN: ATCL-00L S COCKRELL

U S ARMY MATERIEL COMMAND
ATTN: AMCCN

U S ARMY MISSILE COMMAND
ATTN: RD-AC-FS

U S ARMY MISSILE COMMAND
ATTN: AMSMI-AS-AA (COL M F CURTIS)

U S ARMY NUCLEAR & CHEMICAL AGENCY
ATTN: MONA-NU
ATTN: MONA-NU LTC SLATER

U S ARMY TRAINING AND DOCTRINE COMD
ATTN: ATCD-N

U S ARMY WAR COLLEGE
ATTN: DMSPO
ATTN: DOCUMENT CONTROL
ATTN: LIBRARY

USA SURVIVABILITY MANAGMENT OFFICE
ATTN: SLCSM-SE J BRAND

USACACDA
ATTN: ATZL-CAD-N

DEPARTMENT OF THE NAVY

MARINE CORPS
ATTN: CODE POC-30
ATTN: DCS (P&O) REQUIREMENTS DIV
ATTN: DCS (PL) STRAT PLANS DIV
ATTN: DOCUMENT CONTROL

NAVAL AIR FORCE
ATTN: COMMANDER

NAVAL POSTGRADUATE SCHOOL
ATTN: CHAIRMAN, DEPT OF NATL SCRTY AFFRS (NS)
ATTN: CODE 1424 LIBRARY
ATTN: DOCUMENT CONTROL

NAVAL RESEARCH LABORATORY
ATTN: CODE 2627 (TECH LIB)

NAVAL SEA SYSTEMS COMMAND
ATTN: NAVSEA 05R24
2 CYS ATTN: SEA-06G31
ATTN: SEA-06H2
ATTN: SEA-406
ATTN: SEA-55X

NAVAL SURFACE FORCE
ATTN: (N58)

NAVAL SURFACE FORCE
ATTN: COMMANDER

NAVAL SURFACE WARFARE CENTER
ATTN: CODE R14
ATTN: CODE U41

NAVAL TECHNICAL INTELLIGENCE CTR
ATTN: NISC-40
ATTN: NTIC-DA30

NAVAL WEAPONS EVALUATION FACILITY
ATTN: CLASSIFIED LIBRARY

NEW LONDON LABORATORY
ATTN: TECH LIBRARY

NUCLEAR WEAPONS TNG GROUP, ATLANTIC
ATTN: CODE 20

NUCLEAR WEAPONS TNG GROUP, PACIFIC
ATTN: NUC WARFARE DEPARTMENT

OFFICE OF CHIEF OF NAVAL OPERATIONS
ATTN: NOP 021
ATTN: NOP 098(OFC RES-DEV-TEST & EVAL)
3 CYS ATTN: NOP 96(N PROG OFC-SYS ANAL DIV)
ATTN: OP 02
ATTN: OP 022
ATTN: OP 03
ATTN: OP 05
ATTN: OP 06
ATTN: OP 09
ATTN: OP 35 (SURF CBT SYS DIV)
ATTN: OP 654(STRAT EVAL & ANAL BR)
ATTN: OP 70 (FORCE LEVEL PLNS DIV)
ATTN: OP 73 (TAC READINESS DIV)
ATTN: OP 74 (STRIKE & AMPHIB WARF DIV)

SURFACE WARFARE DEVELOPMENT GROUP
ATTN: COMMANDER

SURFACE WARFARE OFFICERS SCHOOL CMD
ATTN: COMBAT SYSTEMS DEPT

US PACIFIC FLEET
ATTN: N-62

WSE-PAC

ATTN: (J32) CDR PATTERSON
ATTN: CMSA
ATTN: J-6
ATTN: J32
ATTN: J54
ATTN: J54 (SPEC WPNS PLANS & POLICY)

DEPARTMENT OF THE AIR FORCE

AFIA/INIS

ATTN: DOCUMENT CONTROL

AFIS/INT

ATTN: DOCUMENT CONTROL

AIR FORCE CTR FOR STUDIES & ANALYSIS

ATTN: AFCSA/SAMI

AIR FORCE INSTITUTE OF TECHNOLOGY/EN

ATTN: AFIT/ENP, R HENGHEOLD

AIR UNIVERSITY LIBRARY

ATTN: AUL-LSE

DEPUTY CHIEF OF STAFF/XOO, PLANS & OPS

ATTN: AF/XOOR(OPNS, OPNL SPT)

DEPUTY CHIEF OF STAFF/XOX

ATTN: DIR OF PLANS, AFXOX

HEADQUARTERS USAF/IN

ATTN: DOCUMENT CONTROL

HQ SAC/INT

ATTN: DOCUMENT CONTROL

HQ USAFE/DOJ

ATTN: USAFE/DOJ (CBT OPNS)

PACAF

ATTN: DOXO

TACOPS/INOS

ATTN: TACOPS/INO

TACTICAL AIR COMMAND

ATTN: TAC/DOA

U S AIR FORCE INTELLIGENCE/INEGD

ATTN: DOCUMENT CONTROL

U S AIR FORCES IN EUROPE/IN

ATTN: DOCUMENT CONTROL

ATTN: USAFE/IN

U S AIR FORCES IN EUROPE/INA

ATTN: DOCUMENT CONTROL

USAFE/DOA

ATTN: USAFE/DOA (OPNS ANAL)

WEAPONS LABORATORY

ATTN: WL/SUL

DEPARTMENT OF ENERGY

LAWRENCE LIVERMORE NATIONAL LAB

ATTN: L-389 R ANDREWS
ATTN: L-6 J HARVEY
ATTN: L-83 F BARISH
ATTN: L-83 M GUSTAVSON
ATTN: R WERNE

LOS ALAMOS NATIONAL LABORATORY

ATTN: A-3, T DOWLER
ATTN: ITO D STILLMAN

MARTIN MARIETTA ENERGY SYSTEMS INC

ATTN: D INGERSOLL
ATTN: G KERR

SANDIA NATIONAL LABORATORIES

ATTN: DIV 9013, W LING
ATTN: TECH LIB 3141 (RPTS REC CLRK)
ATTN: 0332 J W KEIZUR

OTHER GOVERNMENT

CENTRAL INTELLIGENCE AGENCY

ATTN: NATL INTEL COUNCIL/ANAL GP H FORD
ATTN: OFFICE OF EAST ASIA
ATTN: OFFICE OF SOVIET AFFAIRS
ATTN: OSWR/NED

FEDERAL EMERGENCY MANAGEMENT AGENCY

ATTN: OFC OF CIVIL DEFENSE, J F JACOBS

NATIONAL SECURITY COUNCIL

ATTN: G SIGER
ATTN: J MATLOCK
ATTN: T COBB

U S DEPARTMENT OF STATE

ATTN: PM/TMP

U S DEPARTMENT OF STATE

ATTN: EAP/C
ATTN: EUR/RPM
ATTN: EUR/SOV/MULTI

DEPARTMENT OF DEFENSE CONTRACTORS

INST FOR FOREIGN POL ANAL, INC

2 CYS ATTN: C M PERRY
2 CYS ATTN: J K DAVIS
2 CYS ATTN: R L PFALTZGRAFF

KAMAN SCIENCES CORP

ATTN: DASIAC

KAMAN SCIENCES CORPORATION

ATTN: DASIAC

R & D ASSOCIATES

ATTN: DOCUMENT CONTROL

RAND CORP

ATTN: DOCUMENT CONTROL

DNA-TR-90-1 (DL CONTINUED)

RAND CORP

ATTN: B BENNETT

WOHLSTETTER, ALBERT J, CONSULTANT

ATTN: A WOHLSTETTER

DIRECTORY OF OTHER

MARYLAND UNIVERSITY OF

ATTN: H GLAZ MATH DEPT (UNCL PUB RLS
ONLY OTHERS TO NSW)